

IDAHO POWER ENERGY WISE[®] PROGRAM SUMMARY REPORT

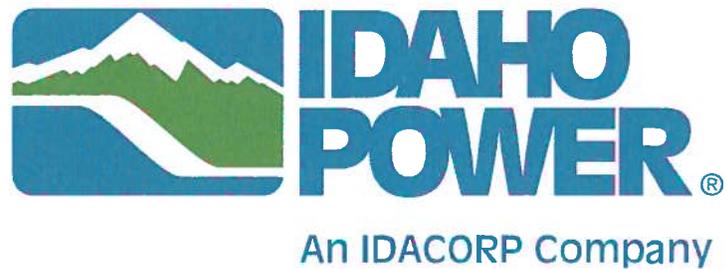
2010-2011

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IDAHO POWER
UTILITIES DIVISION

SUBMITTED BY:
RESOURCE ACTION PROGRAMS

Idaho Power Energy Wise Program

Sponsored by:



Program Summary Report 2010 - 2011

Submitted By:

Resource Action Programs'



June 2011

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This report summarizes the 2010 - 2011 Idaho Power Energy Wise Program which was requested and implemented by teachers at pre-approved schools throughout the Idaho Power service territory. The Program was used by six thousand three-hundred ninety-four (6,394) students, teachers and their families, and was funded from the sale of SO₂ credits.

The Program is a fully implemented, multi-resource efficiency/education Program designed to facilitate installation of efficiency measures in homes and build knowledge of environmental issues. The Program yields a variety of measurable energy savings results using the best messengers - students. The Program delivered a proven blend of teacher-designed classroom activities with hands-on home projects to



The Program delivered a proven blend of teacher-designed classroom activities with hands-on home projects to install high efficiency devices .

install energy efficiency devices and introduce resource-conscious behavior to students and their families. Both educational

"...Many of the students mentioned that they enjoyed switching out the light bulbs. For most of them this was a first."

*Keith Phelps, Teacher
Spalding Elementary*

studies and utility evaluations have confirmed the importance of addressing the various learning styles to maximize both learning and the adoption of new behaviors. The most critical elements of this approach are both the actual use of the new knowledge as well as the reporting function which provides a crucial reinforcement of the learning process while increasing participation and persistence. An overview of the results from the Program appears below, with greater detail in the appendices.

Participant Satisfaction: A significant element of a successful Program is participant satisfaction. Students, teachers and parents are all asked to evaluate the Program and provide personal comments. Responses were unanimously positive and reveal a high level of parent involvement in the activities. Specifically:

- **99% of participating teachers indicated that parents supported the Program.**
- **98% of participating teachers indicated they would recommend this Program to other colleagues.**
- **98% of participating teachers indicated they would conduct this Program again.**

(A summary of responses can be found in Appendix C, Teacher Evaluation Data)

Knowledge Gained: Identical surveys were taken by students prior to the Program and again upon Program completion to measure knowledge gained. Scores and subject knowledge improved from **71% to 82%**.

Audit Data Obtained: A Home Check-up was performed by students and their families, collecting household demographic and usage data along with Program participation information.

- **73% reported that their family homes were owned.**
- **47% reported that their water was heated by electricity.**
- **86% reported that their home has a dishwasher.**

(A summary of responses can be found in Appendix B, Home Check-up)

Measures Installed: Students completed retrofit Home Activities as part of the Program, and reported the measures they installed in their own homes. Specifically:

- **71% reported they installed the 13 Watt Compact Fluorescent Lamp (CFL).**
- **86% reported they installed the LimeLite® Night Light.**

(A summary of responses can be found in Appendix B, Home Activities)

Energy Savings Results: In addition to educating students and their parents, the primary Program goal for utility sponsors is to generate cost-effective energy savings. Student Home Surveys not only provided the data used in Projected Resource Savings, but also reinforced the learning benefits.

Projected Resource Savings

(A list of assumptions and formulas used for these calculations can be found in Appendix A)

Projected Annual Savings

34,600 **therms of gas saved**
1,497,895 **kWh electricity saved**

Projected Ten Year Savings

345,995 **therms of gas saved**
11,548,881 **kWh electricity saved**

Projected Average Annual Savings per Home

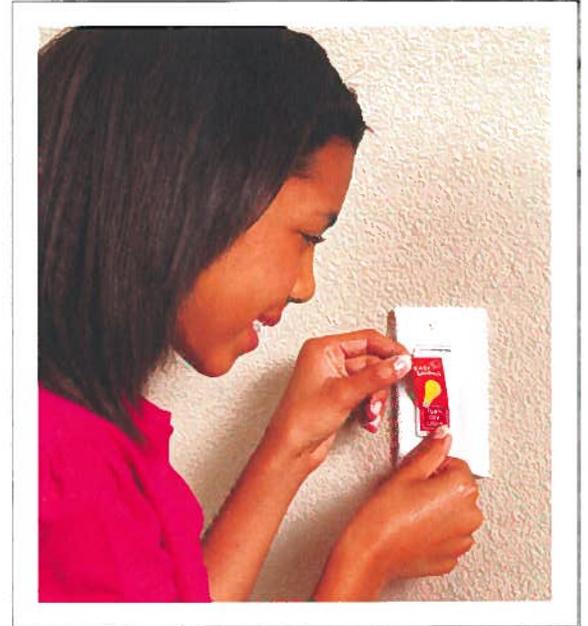
5 **therms of gas saved**
234 **kWh electricity saved**

Projected Average Ten Year Savings per Home

54 **therms of gas saved**
1,806 **kWh electricity saved**

For more than seventeen years, Resource Action Programs (RAP) has designed and implemented resource efficiency and education programs – changing household energy and water use while delivering significant, measurable resource savings for program sponsors. All RAP Programs feature a proven blend of innovative education, comprehensive implementation services, and hands-on activities to put new knowledge to work in students' homes.

RAP Programs serve more than 450,000 households each year through elementary school, middle school, and adult programs. Our fifty person staff manages the implementation process and program oversight for nearly 250 individual programs annually. Recognized nationally as a leader in energy and water efficiency education and program design, RAP has a strong reputation for providing a high level of client service to its sponsors as part of a wide range of conservation and resource efficiency solutions for municipalities, utilities, states, community agencies and corporations.



RAP Programs serve more than 450,000 households each year through elementary school, middle school, and adult Programs.

All aspects of program design and implementation are completed from the Program Center in Sparks, Nevada. These include graphic and web design, print production, warehousing and distribution, kit production, marketing, program management and tracking, data tabulation and reporting.

The school-based Energy Wise Program is fully implemented and designed to generate immediate and long-term savings by bringing interactive “real world” education home with motivated students. Idaho Power identifies and enrolls students and teachers within the designated service territory. Enrolled participants receive educational materials designed to build knowledge and demonstrate simple ways to save, by not only changing habits, but also changing devices. Materials support state and national educational standards, which allow the Program to easily fit into teachers’ existing schedules and requirements.

The Program begins with classroom discussions teaching the importance of using water and energy efficiently, followed by hands-on, creative problem solving. Next, participants take home an Energy Wise Kit that contains high efficiency measures. With the help of their parents, they install the measures in their home and complete a Home Survey. The Energy Wise staff tabulates all responses, including Home Survey information, teacher responses, student input, parent responses, and generates a Program Summary Report. After installing and monitoring the new efficiency measures in their homes, students are able to measure what they have learned by seeing the actual energy monetary savings! These savings benefit both the participating student households and their communities overall.

Each participant receives classroom materials and an Energy Wise Kit containing efficiency measures for their homes to perform the hands-on activities. Modifications were made to select materials which incorporated Idaho Power's logo and color scheme.

Each student/teacher receives:

Student Guide

Student Workbook

Program Introduction Letter to Parent/Guardian*

Home Survey Form

Certificate of Achievement

Energy Wise Kit containing:

- 13 Watt Compact Fluorescent Lamp (CFL)
- 18 Watt Compact Fluorescent Lamp (CFL)
- 23 Watt Compact Fluorescent Lamp (CFL)
- FilterTone® Alarm*
- LimeLite® Night Light
- Natural Resources Fact Chart
- Air Temperature Ruler
- Reminder Stickers and Magnet Pack*
- Parent Comment Card

"GetWise" Wristband

Unlimited Interactive Program Website Access

Toll Free HELP Line

Each teacher/classroom receives:

Teacher Book

Step-by-Step Program Checklist

Lesson Plans

Teacher Program Evaluation/Enrollment Form

Supplemental Activities*

Idaho State Education Standards Correlation Chart

Pre/Post Scantron Survey Answer Keys

Classroom Electricity Posters

Self-Addressed Postage-Paid Envelope



*Materials / Installation Instructions
Provided in English and Spanish

The 2010-2011 Idaho Power Energy Wise Program followed this comprehensive implementation schedule:

1. Identification of Idaho State Education Standards & Benchmarks
2. Curriculum development and refinement (completed annually)
3. Curriculum correlation to Idaho State Education Standards & Benchmarks
4. Materials modification to incorporate Idaho Power's logo and color scheme
5. Incentive Program development
6. Teachers enrolled in the Program individually by Idaho Power
7. Implementation dates scheduled with teachers
8. Program material delivered to coincide with desired implementation date
9. Delivery confirmation
10. Periodic contact to ensure implementation and teacher satisfaction
11. Program completion incentive offered
12. Results collection
13. Program completion incentive delivered to qualifying participants
14. Thank-you cards sent to participating teachers
15. Data analysis
16. Program Summary Report

Participating teachers are free to implement the Program to coincide with their lesson plans and class schedules. The next table is a comprehensive list of classrooms that participated during the 2010-2011 school year.

School	Teacher	Teachers	Students
American Falls Intermediate School	Jacob Foster	1	103
American Falls Intermediate School	Kristen Jensen	1	20
Birch Elementary School	Carol Briggs	1	26
Birch Elementary School	Denice Cain	1	28
Birch Elementary School	Jennifer Hopkins	1	31
Birch Elementary School	Tracie Ingram	1	26
Birch Elementary School	Elizabeth Kelleher	1	31
Birch Elementary School	Juilana Lookhart	1	26
Birch Elementary School	MaryJo Pegram	1	28
Cascade Elementary School	Julie Hamilton	1	30
Castleford Elementary School	Kent Dahl	1	21
Central Canyon Elementary School	Tara Daniel	1	26
Central Canyon Elementary School	Kim Laberteaux	1	26
Central Canyon Elementary School	Shantell Mullanix	1	26
Central Canyon Elementary School	Deb Storey	1	26
Central Elementary School	Nati Alegria	1	30
Central Elementary School	Rudy Beltran	1	23
Central Elementary School	Kaylee Collins	1	30
Central Elementary School	Rebecca Crosswhite	1	26
Central Elementary School	Courtney Davlin	1	30
Central Elementary School	John Harlan	1	26
Central Elementary School	Lori Roberts	1	21
Central Elementary School	Tami Vandeeventer	1	20
Chaparral Elementary School	Jodi Larsen	1	30
Chaparral Elementary School	Joni Leiph	1	30
Chaparral Elementary School	Michelle Montoya	1	30
Chaparral Elementary School	Brenda Walter	1	30
Claude A. Wilcox Elementary School	Emily Bennett	1	28
Claude A. Wilcox Elementary School	Tricia Hemsley	1	27
Claude A. Wilcox Elementary School	Rosalie Jensen	1	28
Council Elementary School	Janice Paradis	1	30
Cynthia Mann Elementary School	Jaci Guilford	1	30
Cynthia Mann Elementary School	Jennifer Hunt	1	30
Desert Springs Elementary School	Heather Docktader	1	24
Desert Springs Elementary School	Jessica McConnel	1	23
Desert Springs Elementary School	Eden Rodriguez	1	23
Desert Springs Elementary School	Katie Strawser	1	23
Edahow Elementary School	Amber Hall	1	30
Edahow Elementary School	Joanne Huber	1	31
Eliza Hart Spalding Elementary School	Shawna Brenna	1	30
Eliza Hart Spalding Elementary School	Marc Brousseau	1	30
Eliza Hart Spalding Elementary School	Vonda Franklin	1	30
Eliza Hart Spalding Elementary School	Keith Phelps	1	30
Ellis Elementary School	Charise Balmer	1	30
Ellis Elementary School	Aaron Hall	1	30

School	Teacher	Teachers	Students
Ellis Elementary School	Trent Merica	1	30
Endeavor School	Terri Bennett	1	27
Endeavor School	Toni Burbank	1	34
Endeavor School	Pat Duncan	2	55
Endeavor School	Mari Strub	1	33
Endeavor School	Rebeca Taylor	1	34
Endeavor School	Sarah Wang	1	25
Falcon Ridge Charter	Tracy Moore	1	33
Falcon Ridge Charter	Patti Smith	1	33
Filer Elementary School	Jana Humphries	1	27
Filer Elementary School	Patti Patterson	1	28
Filer Elementary School	Kent Snow	1	29
Filer Elementary School	Larry Sutton	1	27
Fruitland Middle School	Heidi Olson	1	30
Galileo Math & Science Magnet	Marianne Batten	1	35
Galileo Math & Science Magnet	Beth Bivens	1	32
Galileo Math & Science Magnet	Beverly Derow	1	35
Galileo Math & Science Magnet	Jolene Gunn	1	32
Galileo Math & Science Magnet	Nicole Sarty	1	35
Galileo Math & Science Magnet	Jennifer Sebesta	1	32
Galileo Math & Science Magnet	Elisabeth Sonersen	2	60
Grace Jordan Elementary School	Patty Anderson	1	32
Grace Jordan Elementary School	Susan Bellomy	1	32
Grace Jordan Elementary School	Charlene Goldade	1	32
Greenacres Elementary School	Laura Johnson	1	28
Greenacres Elementary School	Kathy Walker	1	28
Greenhurst Elementary School	Kalene Bales	1	27
Hagerman Elementary School	Ruby Marshall	1	16
Hagerman Elementary School	Creed Robinson	1	20
Hansen Elementary School	Debbie Cottonware	1	30
Harrison Elementary School	Cathy Dobbs	1	30
Harrison Elementary School	Robin Mason	1	60
Highlands Elementary School	Ingrid Jungen	1	30
Holy Spirit Catholic School	Tracy Aytes	1	16
Holy Spirit Catholic School	Peggy Kaiser	1	20
Homedale Middle School	Jennifer Martin	1	30
Horizon Elementary School	Patrick Ash	1	31
Horizon Elementary School	Sue Crandall	1	26
Horizon Elementary School	Angie Kaufman	1	28
I.B. Perrine Elementary School	Daniel Cieslik	1	30
I.B. Perrine Elementary School	Kim Dahlquist	1	30
I.B. Perrine Elementary School	Gaelene Mueller	1	30
I.B. Perrine Elementary School	Hillary Williams	1	30
Idaho Arts Charter School	Andi Arnold	1	32
Idaho Arts Charter School	Steph Brown	1	32

School	Teacher	Teachers	Students
Idaho Arts Charter School	Jennifer Capell	1	32
Idaho Arts Charter School	Jen Lund	1	32
Idaho Arts Charter School	Stephanie VanOrsow	1	32
Idaho Arts Charter School	Karie Yost	1	32
Indian Hills Elementary	Mark Bowman	1	27
Indian Hills Elementary	Bridget Durante	1	27
Indian Hills Elementary	Joyce Pearson	1	27
Indian Hills Elementary	Toni Wright	1	27
Kimberly Elementary School	Kelly Gibbons	1	30
Kimberly Elementary School	Sheryl Sharp	1	30
Lake Ridge Elementary School	Kris Carte	1	30
Lake Ridge Elementary School	Joe Millard	1	28
Lake Ridge Elementary School	Carmi Scheller	1	30
Lewis and Clark Elementary	Beckie Lower	1	28
Lewis and Clark Elementary	Sally Rutten	1	28
Lighthouse Christian School	Jo Bausman	1	8
Lighthouse Christian School	Marge Montanus	1	8
Lincoln Elementary School	Jackie Dick	1	26
Lincoln Elementary School	Lea Rogers	1	26
Lincoln Elementary School	Rhonda Slagel-Sao	1	27
Longfellow Elementary School	Vicki Elkins	1	30
Mary McPherson Elementary School	Charles Patterson	1	32
Mary McPherson Elementary School	Amy Sanders	1	32
Mary McPherson Elementary School	Jerrilene Smith	1	32
Middleton Heights Elementary School	Jayna Eichelberger	1	32
Midvale Elementary School	Varina Picket	1	30
Mill Creek Elementary School	Linda Dux	1	28
Mill Creek Elementary School	Valerie Foster	1	25
Mill Creek Elementary School	Annette Gifford	1	28
Mill Creek Elementary School	Cynthia Hutchinson	1	27
Mill Creek Elementary School	Brandi Janssen	1	26
Mill Creek Elementary School	Glen Kershaw	1	28
Mill Creek Elementary School	Suzanne Wolfkiel	1	27
Morningside Elementary School	Cathy Dobbs	1	110
Oregon Trails Elementary School	Ms. Delia	1	25
Oregon Trails Elementary School	Leah Dow	1	25
Oregon Trails Elementary School	Ms. Keyt	1	25
Oregon Trails Elementary School	Mr. Zunino	1	25
Owyhee Harbor Elementary School	Peggy Hurd	1	32
Paramount Elementary School	Trudy Chambers	1	35
Paramount Elementary School	Cheryl Heuett	1	35
Paramount Elementary School	Carrie Ostrum	1	35
Paramount Elementary School	Jock Summers	1	35
Paramount Elementary School	Julie Summers	1	35
Park Ridge Elementary School	Debbie Curl	1	28

School	Teacher	Teachers	Students
Park Ridge Elementary School	Cathy Sherman	1	28
Park Ridge Elementary School	Andrea Wallin	1	25
Purple Sage Elementary School	Christa Brediger	1	32
Purple Sage Elementary School	Elizabeth Cleaver	1	32
Purple Sage Elementary School	Brad Fackrell	1	28
Purple Sage Elementary School	Sarah Pence	1	31
Purple Sage Elementary School	Brenda Rice	1	29
Ridge Crest Elementary School	Tesa Lenz	1	25
Ridge Crest Elementary School	Cheri Warren	1	28
Ridge Crest Elementary School	LeeAnne Wood	1	26
Ronald Reagan Elementary School	Cierra Christian	1	33
Ronald Reagan Elementary School	Steve McConnel	1	32
Ronald Reagan Elementary School	Jackie Miller	1	33
Salmon Middle School	Jean Hadlock	1	22
Salmon Middle School	Krystal Smith	1	22
Shadow Hills Elementary School	Kenney Jeffries	1	32
Shadow Hills Elementary School	Natalie Roberts	1	32
Shadow Hills Elementary School	Geri Wilson	1	32
Siena Elementary School	Christiana Cacioppo	1	27
Siena Elementary School	Logan Easley	2	54
Siena Elementary School	Tracy Logsdon	1	27
Stoddard Elementary School	Kristin Barrus	1	30
Stoddard Elementary School	Kimberly Buck	1	30
Stoddard Elementary School	Wendy Scott	1	30
Summit Elementary School	Danielle Ashby	1	28
Summit Elementary School	Pam Buchheister	1	28
Summit Elementary School	Jennifer Cooper	1	27
Summit Elementary School	John Derr	1	29
Summit Elementary School	Mary Fraley	1	27
Summit Elementary School	Andy Nauman	1	28
Summit Elementary School	Tracy Park	1	27
Summit Elementary School	Tracy Renteria-Garcia	1	24
Summit Elementary School	Jennifer Shaw	1	28
Summit Elementary School	Kimberly Wallace	1	27
Syringa Elementary School	Becky Bullock	1	20
Syringa Elementary School	Janet Morris	1	19
Syringa Elementary School	Kay Syverson	1	19
Trail Wind Elementary School	Vonnie McDaniels	1	32
Trail Wind Elementary School	Mary Norris	1	105
Ustick Elementary School	Marla Gothard	1	30
Ustick Elementary School	Gerri Moran	1	30
Ustick Elementary School	Julie Thomasen	1	30
Valley View Elementary School	Nadine Chaffee	1	25
Valley View Elementary School	Joan Harrie	1	25
Valley View Elementary School	Kathy Pound	1	25

School	Teacher	Teachers	Students
Van Buren Elementary School	Steven Escobedo	1	29
Van Buren Elementary School	Becky Gan	1	28
Van Buren Elementary School	Ben Jackson	1	28
Van Buren Elementary School	Courtney Lynch	1	28
Van Buren Elementary School	Chris Tiner	1	27
Van Buren Elementary School	Cindy Wells	1	29
Wapello Elementary School	Anita Ellis	1	25
Wapello Elementary School	Kay Sorenson	1	25
Washington Elementary School	Jan Damron	1	24
Washington Elementary School	Jan Grieve	1	24
Willow Creek Elementary School	Nick Channer	1	25
Willow Creek Elementary School	Kim Chierici	1	22
Willow Creek Elementary School	Rebecca Freitag	1	23
Willow Creek Elementary School	M. Montgomery	1	25
Willow Creek Elementary School	Julie Moye	1	20
Willow Creek Elementary School	Fawn Riha	1	26
Wilson Elementary School	Sharlee Hatch	1	25
Wilson Elementary School	Susan Martin	1	25
Wilson Elementary School	Katrina McGee	1	25
Wilson Elementary School	Debbie Peterson	1	30
Wilson Elementary School	D'Ann Rodwell	1	26
Wilson Elementary School	Nikki Search	1	26
Wilson Elementary School	Michelle Worley	1	30
Wings Charter Middle School	Dave Grindstaff	1	33
Wings Charter Middle School	Athena Hildreth	1	33
Wood River Middle School	Jeremy Silvis	1	30
Woodside Elementary School	Mary Ann Ward	1	70

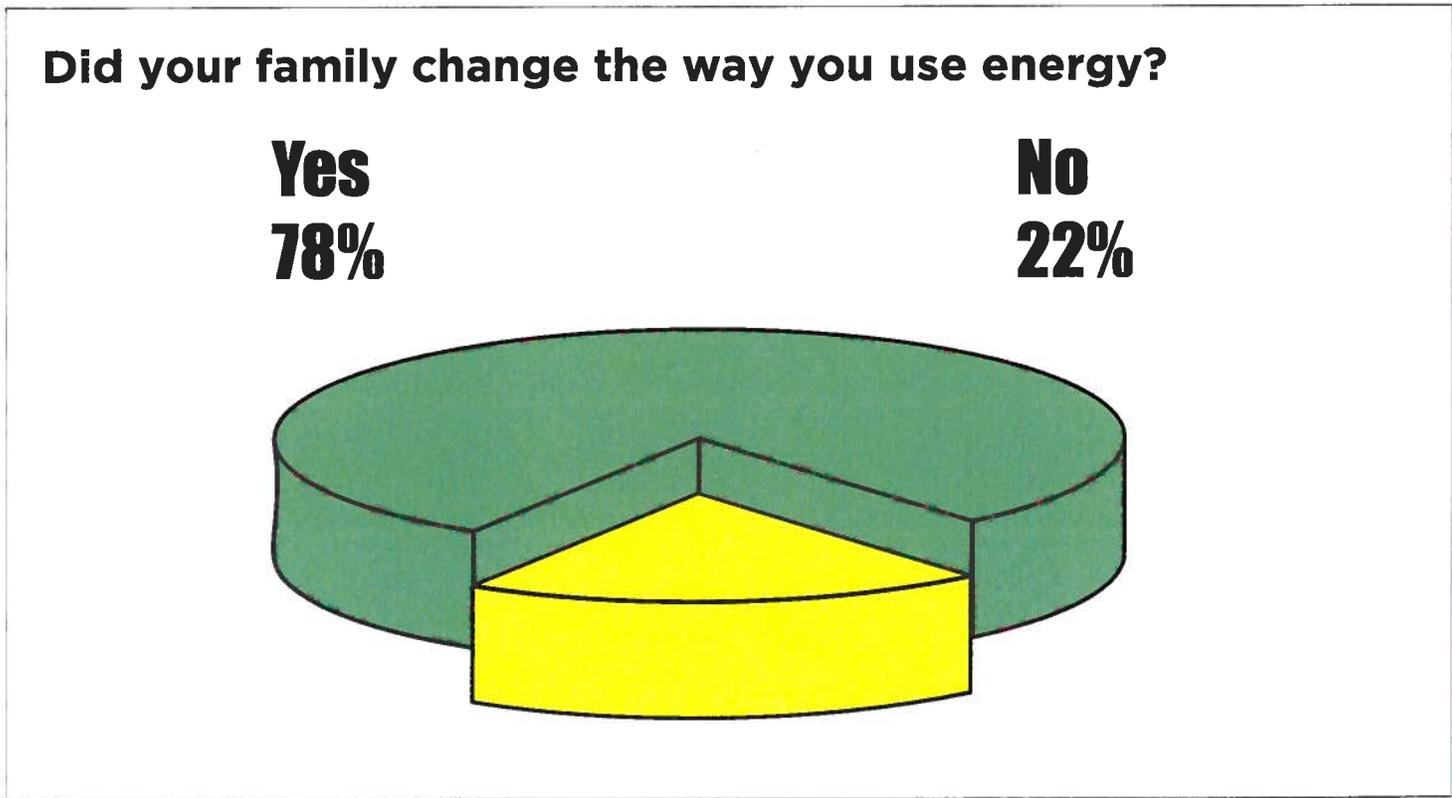
210	6,184
6,394	

The Idaho Power Energy Wise Program has had a significant impact within the community. As illustrated below, the Program successfully educated a portion of the community about energy efficiency while generating resource savings through the installation of efficiency measures in homes. Home Survey information was collected to track savings and provide household consumption and audit data to sponsors. Program evaluations and comments were collected from teachers, students, and parents/guardians. The following Program elements were used to collect this data:

A. Home Survey and Retrofits

Upon completion of the Program, participating families are asked to complete a Home Survey to assess their resource use, verify product installation, provide demographic information and measure participation rates. A few samples of questions asked are below, while a complete summary of all responses is included in the appendices.

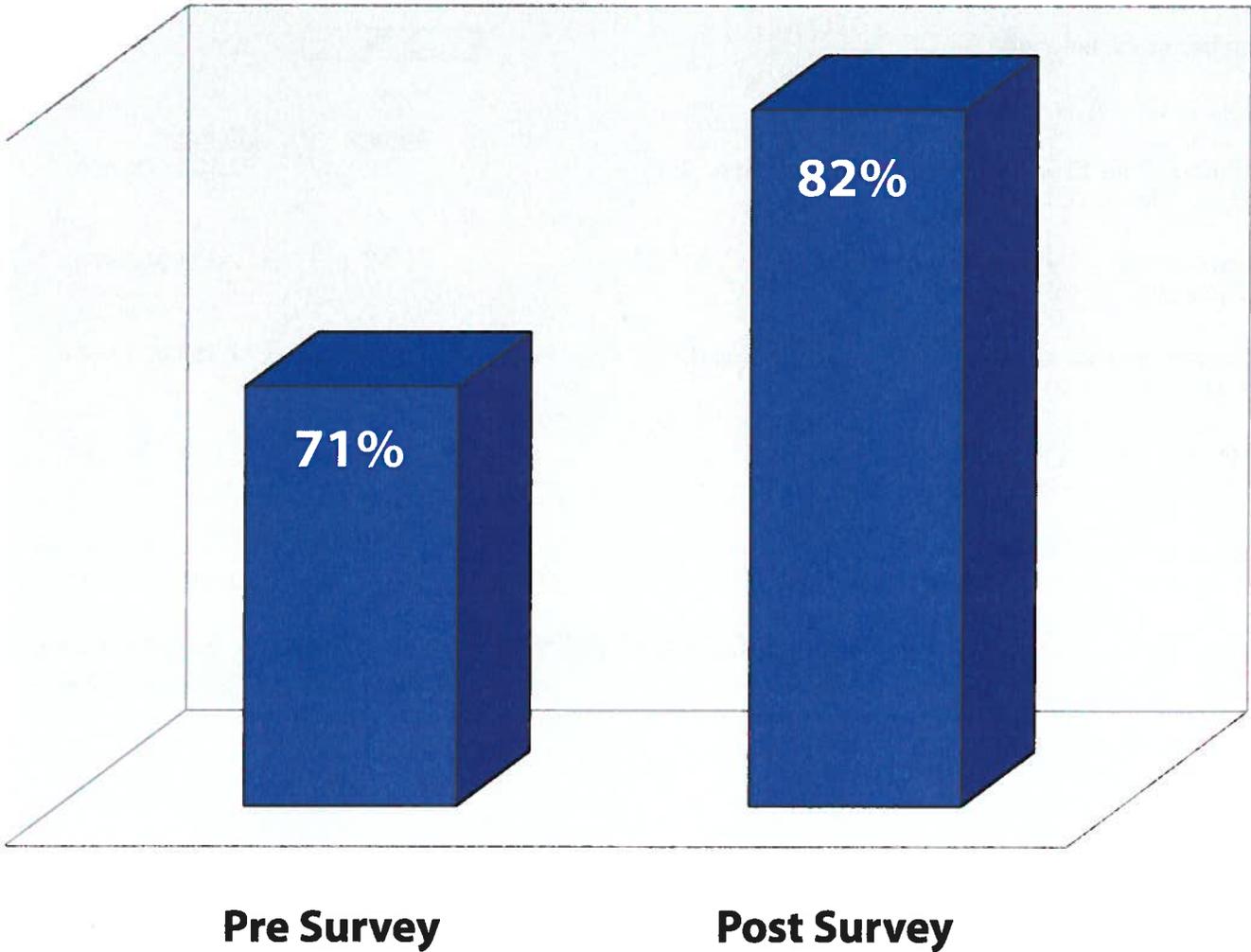
- Did your family install the first Compact Fluorescent Lamp (CFL)?** Yes - 71%
- Did your family install the LimeLite® Night Light?** Yes - 86%
- Did your family change the way you use energy?** Yes - 78%



B. Knowledge Gained

On the Home Survey students were asked to complete a ten question survey before the Program was introduced and then again after it was completed to determine the learning impact and the knowledge gained through the Program. The average student answered **7.1** questions correctly prior to being involved in the Program and then improved to answer **8.2** questions correctly following participation.

Survey scores improved from 71% to 82%



C. Energy Savings Summary

As part of the Program and working with parents or guardians, students installed resource efficiency measures in their homes. They also measured the pre-existing devices to calculate savings that they generated. Using the family habits collected from the Home Survey as the basis for this calculation, six thousand three-hundred ninety-four (6,394) households are expected to save the following resource totals. Savings from these actions and new behaviors will continue for many years to come.

Projected Resource Savings

Number of Participants:

6,394

	<u>Annual</u>	<u>Lifetime</u>
Reduction from 13 watt compact fluorescent lamp (CFL): Product Life: 10,000 hours	311,517	2,133,678 kWh
Reduction from 18 watt compact fluorescent lamp (CFL): Product Life: 10,000 hours	345,871	2,368,977 kWh
Reduction from 23 watt compact fluorescent lamp (CFL): Product Life: 10,000 hours	431,288	2,954,028 kWh
Reduction from LimeLite® night light: Product Life: 10 years	167,872	1,678,719 kWh
Reduction from Filtertone® air filter alarm: Product Life: 10 years	34,600 241,348	345,995 therms 2,413,479 kWh
TOTAL PROGRAM SAVINGS:	34,600 1,497,895	345,995 therms 11,548,881 kWh
TOTAL PROGRAM SAVINGS PER HOUSEHOLD:	5 234	54 therms 1,806 kWh

D. Participant Response

Program improvements are based on participant feedback received from each Program. Students, teachers and parents/guardians are each asked to evaluate relevant aspects of the Program. Each response is reviewed for pertinent information to both the Program and the Program sponsor. The following is a sample of feedback collected during the Program.

Teacher Response

(A summary of responses can be found in Appendix C)

98% of participating teachers indicated they would conduct the Program again given the opportunity.

98% of participating teachers indicated they would recommend the Program to their colleagues.

In my opinion, what the students like best about the material/Program is:

"...Ideas about conservation - we now have a recycling bin in our room!"

Tricia Hemsley, Claude A. Wilcox Elementary School

"...The students loved the boxes. Many of them said they enjoyed calculating the savings with their parents. Many expressed pride in seeing the items from the kit and knowing they were conserving energy. They felt a sense of ownership and empowerment."

Beth Bivens, Galileo Math & Science Magnet

"...The light bulbs and night lights - having the family work together."

Stephanie VanOrsow, Idaho Arts Charter School

"...The wristbands were a big hit. They really liked the soap activity and apple activity."

Joyce Pearson, Indian Hills Elementary

"...Things were "real" to them - it connected with them."

Andrea Wallin, Park Ridge Elementary School

Teacher Response (cont.)

As a teacher, the aspect of the Program/materials I liked best was:

"...All materials. It was great!"

Juliana Lookhart, Birch Elementary School

"...The experiments included. Hands-on is so wonderful."

Carol Briggs, Birch Elementary School

"...The teacher materials were excellent!!! Easy to use and follow lesson plans, the option of extra activities and ideas were great. I would definitely want to do this program again next year!"

Katie Stawser, Desert Springs Elementary School

"...Well organized!"

Andrea Wallin, Park Ridge Elementary School

"...The program materials fit so well with so many of our education standards."

Cheri Warren, Ridge Crest Elementary School

"...Easy to use, ready to teach."

Wendy Scott, Stoddard Elementary

In the future, one thing I would change would be:

"...Nothing. This is a great program."

Creed Robinson, Hagerman Elementary

"...I would like the due date for the project to be June 1st. This would help because the project would not interfere with our state testing."

Daniel Cieslik, I.B. Perrine Elementary

"...Color pictures."

Sally Rutten, Lewis and Clark Elementary

"...Provide in-class worksheet or quiz."

Wendy Scott, Stoddard Elementary

"...Student workbooks in Spanish."

Kim Chierici, Willow Creek Elementary School

Teacher Letters

Dear Idaho Power,

My classroom participated in the Energy Wise Program this year. I found the teaching materials and activities well written and student friendly. The posters and additional activities fit in well with the curriculum and the students' interest level. We did several lessons together and went over their requirements before receiving their kits and workbooks.

I had several workbooks returned the next day due to their high interest level in this home project. The excitement built within the class as they saw their peers returning their books and getting their wristbands. They shared with each other how they did the activity with their parent and had some humorous stories to tell. I enjoyed hearing their insights about saving energy in their homes and how they educated their family members.

Our classroom has handled the recycling program in our school building for several years. They are very aware of how to conserve and reuse in our school. This project helped cement this concept on an individual bases. Thank you for this opportunity to inform and educate our community through our students.

Sincerely,


Ms. Guelene Ritchie Mueller
L.B. Perrine 5th grade
Twin Falls, Idaho

Dear Idaho Power Energy Wise Representatives,

This message is to thank you for including the sixth grade at Hansen Elementary School in your Energy Wise program. The students were very excited about the "kits" and impatient to get them home. I felt it was important to go over the learning materials and activities in class before sending the kits home. I think it helped to motivate them to pay attention and do their best work as we went through the activities.

I feel this was worthwhile time spent in class and it supplemented our unit on environmental science nicely. My students did not understand about renewable and non-renewable resources nor did they know the whole story of fossil fuels. We live in an area where wind generation is becoming more and more prevalent and in a prime area to discuss just what an aquifer is and how it relates to us. I feel the one thing that is needed is to have the take home workbook available in Spanish. I would send home both versions with my students that come from Spanish speaking homes so that they can work side by side with their parents.

Thank you again for including us. I hope these lessons learned will be something my students can use for a lifetime.

To Whom It May Concern,

I would like to offer my endorsement of the Electricity unit that Idaho power sponsored for our 4th graders. The kit included a great workbook for at home studies with their parents. It also included a kit that encouraged parents and students to help make their home more energy efficient with light bulbs, a nightlight, a temperature ruler, and a filter alarm. The students had a wonderful time working with their parents as they installed these items, and figured out how much energy they would save!

The workbook for school helped with so many of the science standards. We teach an electricity kit and this was a wonderful way to wrap up what the students had learned. It gave the students a "real life" understanding of electricity and how important conservation is.

Thanks so much for offering these materials to our classrooms. What a great community partner.

Sincerely,

Mary Jo Pegram
mpeggram@vallivue.org

Sincerely,


Debble Cottonware, 6th grade
Hansen Elementary School
Hansen, Idaho

Parent Comments: From both a utility and teacher perspective, parent/guardian involvement with Program activities and their children is of paramount interest. When parents/guardians take an active role in their child's education it helps the schools and strengthens the educational process considerably. When students successfully engage their families in the retrofit and home efficiency projects, utility efficiency messages have been powerfully delivered to two generations in the same household. The Program is a catalyst for this family interaction, which is evidenced by the parent/guardian comments which are received each year. An excerpt is presented below.

Parent/Guardian Response

What comments would you like to express to your child's Program sponsor?

"...Eye opening to adults"

Brian Decker, Birch Elementary

"...Thank you! It makes our son think twice about leaving lights on"

Wendey Hoagland, Birch Elementary

"...Thank you! We appreciate you!"

Sheila & William Guchess, Ellis Elementary School

"...Good job. I wish more people conserved and actually cared about the environment."

Russell Maw, Galileo Math & Science Magnet

"...This is a great program to help make the kids and parents alike aware of how to save energy"

Lorinda Bagley, Idaho Arts Charter

As a parent which aspect of the Program did you like best?

"...Having our child learn about energy conservation and how to do our part to help reduce energy conservation"

Scott Ratkowski, Birch Elementary

"...Calculating the kilowatt- hours saved per year"

George Hugher, Paramount Elementary

"...I liked the student workbooks and energy wise kit that came home. We read through the book and installed the items in our home together"

Pamela Tatum, Purple Sage

Parent/Guardian Response (cont.)

Dear Idaho Power

Thank you for your efforts to teach our children and all of us parents about being energy wise. Your energy wise kit was very helpful and full of information.

Thanks again,

The Delwatts

Idaho Power

Thank you for sending me energy saving kit home with our child. It has helped us all to learn what we can do to start saving energy. We are putting these tools to use and can't wait to see a difference.

Thank you

Dawn Kilbarr
Kye Kilbarr

Student Letters

Dear Idaho Power,

Thank you for sponsoring the Energy Wise program. My family and I really liked that being able to monitor energy use and how much fuel we were using and we had fun doing the work.

Shirley

April 5, 2011

Dear Idaho Power,

Your Energy Wise program has taught me new things that I can do around my house to conserve energy for future use. On the day that I received my kit I installed the things in the kit around my house. It helped me and my family save money as well as energy. I think that the Energy Wise program is a terrific way to help kids in Idaho save energy. Thank you for investing in my class and me, you are really making a difference.

Sincerely,
Evan

Student Letters

Dear Idaho Power 10/26/11

I have just received the Energy Use Kit. My family and I liked it. We also learned a lot of ways to save energy.

and light, you provide for my family and me. Now with the Energy Use Kit we are considering it.

Sincerely,
Sydney
11.27.11

Thank You



Dear Idaho Power

Thank you for all your help. I really loved the Energywise Program - it was wonderful. I learned how to use less power. When I took the kit home I was excited to work on it with my dad. I learned lots of things. Thank you!! Energy wise is an awesome program.



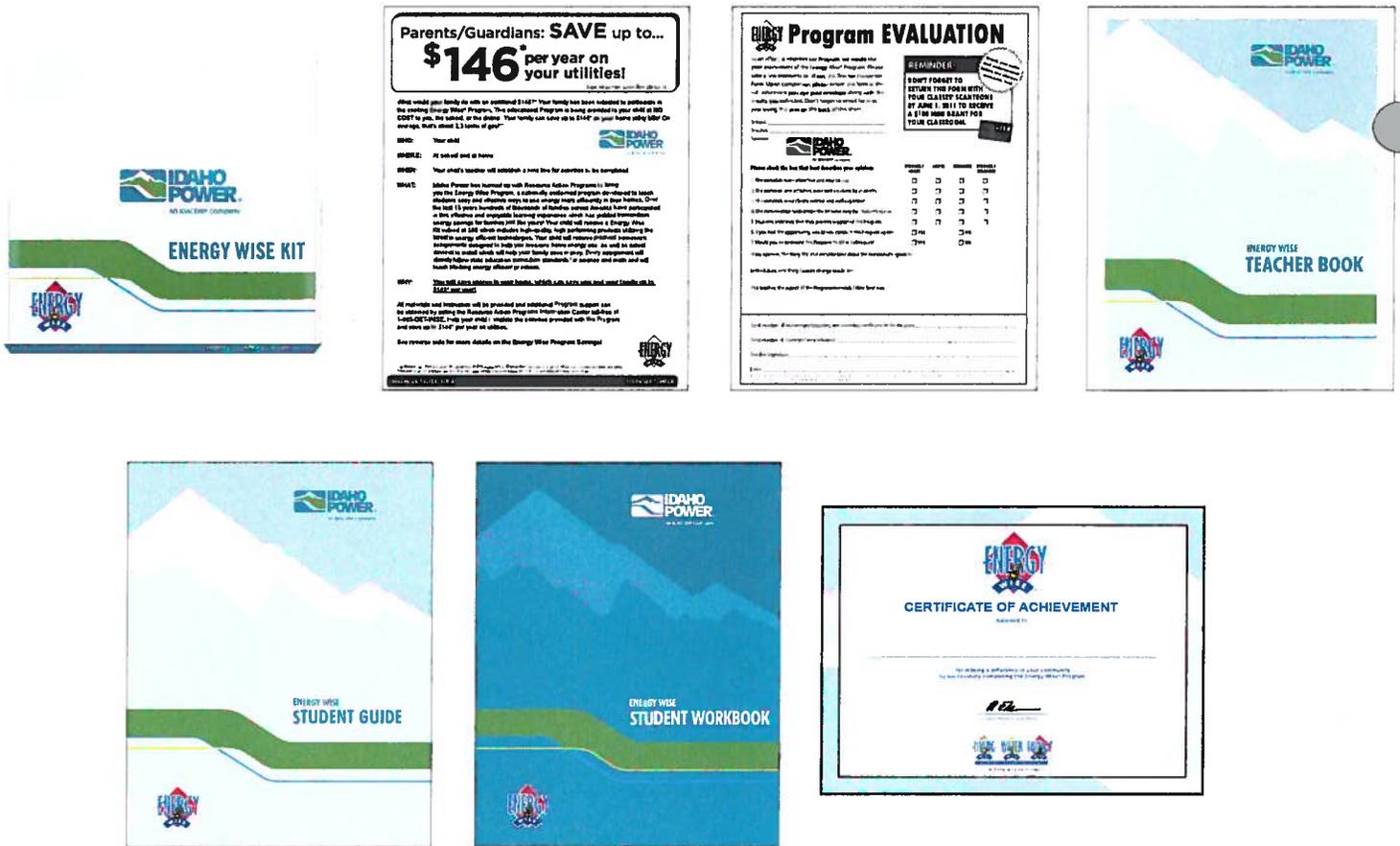
Sincerely
Paola Mendoza

E. Program Enhancements

In addition to increasing resource awareness and efficiency, the Program strengthens bonds between sponsors and their communities. The Program has been designed from start to finish with this in mind. Some of the steps taken to ensure our sponsors receive the greatest possible exposure are as follows:

Promotion of Sponsor Programs: Program materials can be used to publicize and boost enrollment in additional efficiency program opportunities. This option was not used, however, Energy Wise can easily promote residential programs such as toilet replacement or other programs.

Custom Branding: Each Resource Action Kit was labeled with the Idaho Power logo. In addition to the Resource Action Kit, the Introduction to Parent Letter, and Teacher Program Evaluation featured sponsor branding.



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Projected Savings from 13 Watt CFL Retrofit

Average length of use:	1,460 hours per year ³
Product life:	10,000 hours ¹
Average incandescent light bulb uses:	60 watts per hour
Compact fluorescent light bulb uses:	13 watts per hour
Energy saved per year:	69 kWh
Energy saved over life expectancy:	470 kWh

Installation / participation rate of:	1 ²
Number of Participants	6,394 ²

Reduction from compact fluorescent light bulb:

Annual kWh:	311,517 kWh
Lifetime kWh:	2,133,678 kWh

¹ Provided by manufacturer.

² Data reported by program participants.

³ Assumption (4 hours per day)

Projected Savings from 18 Watt CFL Retrofit

Average length of use:	1,460 hours per year ³
Product life:	10,000 hours ¹
Average incandescent light bulb uses:	75 watts per hour
Compact fluorescent light bulb uses:	18 watts per hour
Energy saved per year:	83 kWh
Energy saved over life expectancy:	570 kWh

Installation / participation rate of:	65% ²
Number of Participants	6,394 ²

Reduction from compact fluorescent light bulb:

Annual kWh:	345,871 kWh
Lifetime kWh:	2,368,977 kWh

¹ Provided by manufacturer.

² Data reported by program participants.

³ Assumption (4 hours per day)

Projected Savings from 23 Watt CFL Retrofit

Average length of use:	1,460 hours per year ³
Product life:	10,000 hours ¹
Average incandescent light bulb uses:	100 watts per hour
Compact fluorescent light bulb uses:	23 watts per hour
Energy saved per year:	112 kWh
Energy saved over life expectancy:	770 kWh

Installation / participation rate of:	60%	²
Number of Participants	6,394	²

Reduction from compact fluorescent light bulb:

Annual kWh:	431,288 kWh
Lifetime kWh:	2,954,028 kWh

¹ Provided by manufacturer.

² Data reported by program participants.

³ Assumption (4 hours per day)

Projected Savings from Night Light Retrofit

Average length of use:	4,380 hours per year ³
Average nightlight uses:	7 watts per hour
LimeLite uses:	0.03 watts per hour
Product life:	10 years ¹
Energy saved per year:	31 kWh per year
Energy saved over life expectancy:	305 kWh

Installation / participation rate of:	86%	²
Number of Participants	6,394	²

Reduction from LimeLite® Night Light:

Annual:	167,872 kWh
Lifetime:	1,678,719 kWh

¹ Provided by manufacturer.

² Data reported by program participants.

³ Assumption (12 hours per day)

Projected Savings from FilterTone® Retrofit

Annual energy use by air conditioner, heat pump or furnace:	2,796 kWh ⁴
Projected increase in efficiency:	3% ³
Product life:	10 years ¹
Energy saved per year:	84 kWh per year
Energy saved over life expectancy:	839 kWh

Annual energy use by air conditioner, heat pump or furnace:	650 therms ³
Projected increase in efficiency:	1.85% ³
Product life:	10 years ¹
Energy saved per year:	12 therms per year
Energy saved over life expectancy:	120 therms per year

Installation / participation rate of:
Number of Participants

45%	²
6,394	²

Total reduction from FilterTone alarm:

Annual: 34,600 therms
Lifetime: 345,995 therms

Annual: 241,348 kWh
Lifetime: 2,413,479 kWh

¹ Provided by manufacturer.

² Data reported by program participants.

³ Reichmuth P.E., Howard. (1999). Engineering Review and Savings Estimates for the 'Filtertone' Filter Restriction Alarm.

⁴(2010, July 7). Retrieved July 7, 2010, from U.S. Department of Energy, Energy Information Administration Residential Energy Consumption Web site:

<http://www.eia.doe.gov/emeu/recs/recs2001/enduse2001/enduse2001.html>

Home Survey and Retrofit Data

Home Check-Up

1 What type of home do you live in?	
Single family home	81%
Multi-family (2-4 units)	12%
Multi-family (5-20 units)	6%
Multi-family (21+ units)	1%
2 Was your home built before 1992?	
Yes	42%
No	58%
3 Is your home owned or rented?	
Owned	73%
Rented	27%
4 How many kids live in your home (age 0-17)?	
1	10%
2	31%
3	29%
4	17%
5+	13%
5 How many adults live in your home (age 18+)?	
1	11%
2	73%
3	10%
4	4%
5+	2%
6 Does your home have a programmable thermostat?	
Yes	71%
No	29%
7 What is the main source of heat in your home?	
Natural Gas Furnace	54%
Electric Heater	33%
Propane	4%
Heating Oil	1%
Wood	4%
Other	4%

Due to rounding of numbers, percentages may not add up to 100%.

Home Check-Up

8 What type of air conditioning unit do you have?

Central Air Conditioner	71%
Evaporative Cooler	5%
Room Unit	12%
Don't Have One	12%

9 Does your home have a dishwasher?

Yes	86%
No	14%

10 How is your water heated?

Natural Gas	53%
Electricity	47%

Due to rounding of numbers, percentages may not add up to 100%.

Home Activities

1 Did your family install the 13 watt Compact Fluorescent Lamp (CFL)?	Yes	71%
	No	29%
2 If you answered "yes" to question 1, what was the wattage of the incandescent bulb you replaced?	60-watt	41%
	75-watt	8%
	100-watt	4%
	Other	12%
	Don't Know	15%
	Didn't install the CFL	20%
3 Did your family install the 18 watt Compact Fluorescent Lamp (CFL)?	Yes	65%
	No	35%
4 If you answered "yes" to question 3, what was the wattage of the incandescent bulb you replaced?	60-watt	24%
	75-watt	21%
	100-watt	6%
	Other	9%
	Don't Know	15%
	Didn't install the CFL	25%
5 Did your family install the 23 watt Compact Fluorescent Lamp (CFL)?	Yes	60%
	No	39%
6 If you answered "yes" to question 5, what was the wattage of the incandescent bulb you replaced?	60-watt	19%
	75-watt	11%
	100-watt	20%
	Other	8%
	Don't Know	15%
	Didn't install the CFL	28%
7 Did your family install the LimeLite [®] Night Light?	Yes	86%
	No	14%
8 Did your family raise the temperature on your refrigerator?	Yes	21%
	No	79%
9 Did your family lower your water heater settings?	Yes	29%
	No	71%

Due to rounding of numbers, percentages may not add up to 100%.

Home Activities

10 Did your family install the Filtertone[®] Alarm?

Yes	45%
No	55%

11 How much did your family turn down the thermostat in winter for heating?

1-2 degrees	22%
3-4 degrees	18%
5+ degrees	13%
Didn't Adjust Thermostat	47%

12 Did you work with your family on this program?

Yes	84%
No	16%

13 Did your family change the way they use energy?

Yes	78%
No	22%

14 How would you rate the Energy Wise[®] Program?

Great	48%
Pretty good	33%
Okay	17%
Not so good	3%

Due to rounding of numbers, percentages may not add up to 100%.

Teacher Evaluation Data

1 The materials were attractive and easy to use.

Strongly Agree	68%
Agree	32%
Disagree	0%
Strongly Disagree	0%

2 The materials and activities were well received by students.

Strongly Agree	56%
Agree	44%
Disagree	0%
Strongly Disagree	0%

3 The materials were clearly written and well organized.

Strongly Agree	63%
Agree	36%
Disagree	0%
Strongly Disagree	1%

4 The conservation technologies were easy for students to use.

Strongly Agree	60%
Agree	40%
Disagree	0%
Strongly Disagree	0%

5 Students indicated that their parents supported the Program.

Strongly Agree	39%
Agree	60%
Disagree	1%
Strongly Disagree	0%

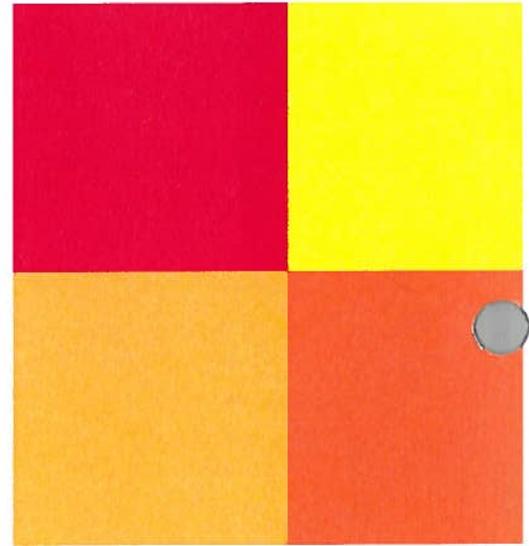
6 If you had the opportunity, would you conduct this program again?

Yes	98%
No	2%

7 Would you recommend this program to other colleagues?

Yes	98%
No	2%

Due to rounding of numbers, percentages may not add up to 100%.



RESOURCE ACTION PROGRAMS®
976 United Circle Sparks, NV 89431
888-GET-WISE • www.resourceactionprograms.org