

NEED



National Energy Education Development Project



Annual Report **2008**
Putting Energy Into Education

Meet THE STAFF

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Cindy Foster

The NEED Project is a 501(c)(3) nonprofit education association providing professional development, innovative materials correlated to the National Science Education Content Standards, ongoing support and recognition to educators nationwide.

The mission of the NEED Project is to promote an energy conscious and educated society by creating effective networks of students, educators, business, government and community leaders to design and deliver objective, multi-sided energy education programs.

The NEED Project

National Energy Education Development

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Board Of DIRECTORS

CHAIRMAN

Rick Zuercher

Dominion

VICE CHAIRMAN

Philip Cochrane

BP

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Paul Loeffelman

American Electric Power

Constance Beatty

Kennedy Middle Grade School—Kankakee, IL
NEED Teacher Advisory Board Representative

Dan Cummings

Marsh, Inc.

Tom Fry

National Ocean Industries Association

Kevin Galligan

Cape Light Compact

Diane Lear

National Hydropower Association

Linda Silinsky

Schlumberger Oilfield Services, retired

John Weiner

Energy Information Administration, retired

Barry Russell

Independent Petroleum Association of America



Message from **THE CHAIRMAN**

Public education about energy has become more important than ever in the face of record high oil and gasoline prices, an ever-growing appetite for electricity, global competition for energy resources, and an intensifying dialog over the role of energy in climate change. We continue to hear from energy companies and agencies that the pool of employment candidates is fairly small and that a national effort to encourage students to consider careers in energy is necessary. NEED's role in the education of our teachers and students is crucial today for preparing students to make the appropriate decisions about our energy future when they become adults and assume leadership roles.

As I attend NEED teacher workshops and student events throughout the year, I realize that the work we do has significant impact – educating teachers and students with energy content in a balanced way, encouraging student leadership, bringing the community into the classroom and the classroom into the community, and preparing students to share their knowledge with their families and peers. NEED students develop energy knowledge and a great deal more.

NEED's Vision 2030 plan recommends meeting the growing demand for energy education by significantly expanding NEED's reach in the nation's schools over the next decade. What does this mean? It means that NEED, working with our sponsors and partners, will be making every effort to supply curriculum and training wherever and whenever possible. We are looking at new methods of delivery of NEED programs, moving many more resources to the web than ever before – knowing that teachers may not be able to attend NEED workshops, but will find value in the 28 years of curriculum development and expansion found in the curriculum materials in use today. NEED has changed as the classroom experience has evolved and we must stay fresh, current and responsive to the needs of today's students, teachers, and families.

The NEED Board of Directors is committed to the success of NEED and is actively seeking new partners and sponsors to assist NEED



in bringing teacher training and curriculum to more communities. I was pleased when my own company, Dominion, chose to provide funding for NEED's expanded climate change curriculum and teacher workshops. As teachers request more training and resources, companies and organizations like Dominion will need to support NEED's efforts more than ever before. As we celebrate the 28th Annual NEED Youth Awards for Energy Achievement, we are grateful to the thousands of teachers and students who believe that energy education is important to our nation's future and who carry that message to their schools and communities each day. Dominion is proud to be a sponsor of NEED programs in the communities we serve and supports NEED's rapid expansion into the nation's classrooms.

Kind regards,

A handwritten signature in black ink that reads "Richard Zuercher". The signature is stylized and written in a cursive-like font.

Richard Zuercher
Chairman

Message from the EXECUTIVE DIRECTOR

When I began writing the message for the 2007 Annual Report, I had just completed my first six months as NEED's Executive Director. I recall thinking, "Can NEED possibly get any busier and more exciting than it is right now?" The answer is a resounding YES. As energy continues to be the subject of dinner table conversations and daily media reports, NEED continues to see extraordinary interest and growth from classrooms nationwide. We are fortunate to have committed partners and sponsors who support the increasing demand for NEED materials and training in populated urban areas and small rural communities. Some of NEED's sponsors have provided support for classrooms for well over 15 years. Other sponsors have found value in NEED's comprehensive programming and joined us in 2007 and 2008 to reach more teachers and students than ever before. No matter the reason, the support of our schools, sponsors and partners has helped NEED teach the teachers and students who will map out the future of energy development, production, and use in this country and throughout the world.

Success builds a foundation for greater success. Programs like our Pacific Gas and Electric Solar Schools Program and our Duke Energy efficiency programs paved the way for new programs. The new ConocoPhillips-NEED partnership reaches 24 communities around the country – bringing teacher training and hands-on curriculum materials to local teachers. The TXU Energy Solar Academy brings the science of energy and solar education to schools across Texas, while the ComEd energy education program brings teacher training focused on the science of energy and electricity generation and economics to teachers in the Chicago area. Dominion responded when teachers asked for an expanded climate change component to NEED curriculum and is supporting curriculum development and pilot workshops. These partners and other new and exciting opportunities are highlighted throughout the 2008 Annual Report.

This year, I am pleased to honor two of NEED's strongest supporters with 2008 Distinguished Service Awards. Irene Brown and Viola Henry have taught me a great deal personally and professionally about dedication and service to energy education. These two women have reached countless teachers and students through teaching, learning, and philanthropy. Our 2008 State Program



of the Year goes to the Ohio Energy Project—a great team of individuals who have built an extraordinarily strong Ohio energy education network celebrating its 20th anniversary this year.

This message gives me the opportunity to pause and say how grateful we are to the great students, teachers, administrators, parents, sponsors, and partners in the NEED family. It is safe to say that this NEED staff, as well as our Board of Directors, Teacher Advisory Board, subject matter experts, sponsors and lead teachers have the energy to make so much happen and to keep up with the demand for energy education nationwide. We have much to accomplish, and many people to educate about energy. NEED is ready, capable, efficient, and fun.

To the teachers, students, and parents assembled in Washington, DC for our 28th Annual Youth Awards Program for Energy Achievement, congratulations on a job well done. I ask that you stick with us and stay involved as we face the energy challenges and opportunities ahead.

With gratitude,

A handwritten signature in black ink that reads "Mary E. Spruill". The signature is fluid and cursive, written on a light-colored background.

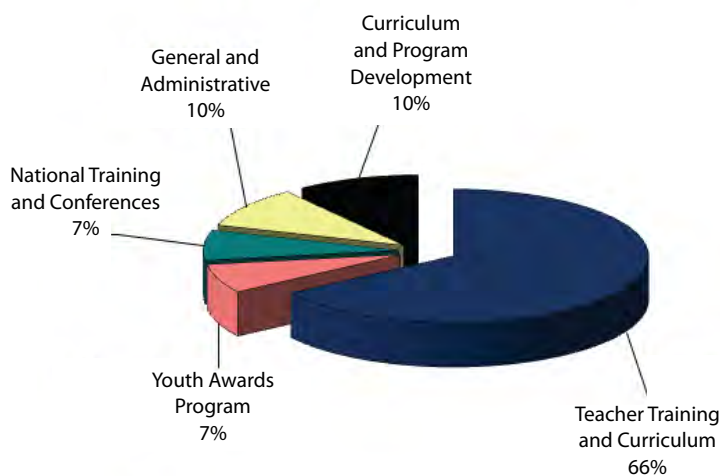
Mary E. Spruill

Finances 2007

Statement of Revenues Collected and Expenses Paid for the Year Ended December 31, 2007.

To download copies of the NEED Project's latest audited financial statement, 990 form, and IRS 501(c)(3) nonprofit determination letter, go to NEED's website at www.need.org.

EXPENSES BY FUNCTION



INCOME

Grants and Contributions	5,194,115
In-Kind Contributions	47,000
Miscellaneous	16,729
Total Revenues	\$ 5,257,844

EXPENSES

Program Expenses

Teacher Training and Curriculum	3,066,987
Youth Awards Program	326,472
National Training and Conferences	339,556
Total Program Expenses	3,733,015

Support Services

General and Administrative	463,318
Curriculum and Program Development	475,507
Total Supporting Services	938,825

Total Expenses	\$ 4,671,840
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INCREASE IN NET ASSETS

	586,004
Net Assets, Beginning of Year	325,362
Net Assets, End Of The Year	\$ 911,366

STATEMENT OF FINANCIAL POSITION

December 31, 2007 (unaudited)

ASSETS

Cash	245,569
Accounts Receivable	478,410
Inventory	323,340
Furniture, Fixtures & Equipment, net	25,998
Other Assets	2,177
Deferred Rent Benefits	12,514
Total Assets	\$ 1,088,008

LIABILITIES AND NET ASSETS

Accounts Payable	175,026
Other Liabilities	1,616
Total Liabilities	176,642
Net Assets	911,366
Total Liabilities and Net Assets	\$ 1,088,008



This is **NEED**

In 1980, the NEED Project began as a one-day celebration of energy education. A Joint Congressional Resolution established National Energy Education Day. A Presidential Proclamation from President Jimmy Carter proclaimed the need for comprehensive energy education in our nation's schools, a reduction of our dependence on fossil fuels, and increasing use of renewable energy technologies and energy efficiency. Today, twenty-eight years later, the same message holds true.

NEED and the teachers, students, partners, and sponsors who make up our network, strive to make energy education a priority in the nation's schools. In some classrooms, that means teaching energy in art and drama, having students perform plays about coal mining and wind generated electricity. In others, it means learning more about the science of thermal and radiant energy. For some classrooms, it means learning about careers in energy today and tomorrow and emphasizing the skills today's students will need to enter the energy workforce. NEED materials make a strong impact at all grade levels, K through 12. Many community colleges find value in NEED's comprehensive materials as they add coursework dealing with today's energy issues.

Energy is a topic that continues to grow in importance as the global population faces energy challenges and opportunities. Today's students must learn to apply energy technologies to use energy more efficiently, to lessen or eliminate environmental impacts of energy use, and to find new ways to use our energy sources more wisely and more economically.



The energy industry continues to change as the demands of our nation and our planet change. It is a dynamic industry, one that welcomes tomorrow's construction foremen, architects, scientists, engineers, divers, ship builders, public policy experts, analysts, economists, financiers, welders, nuclear physicists, truck drivers, environmental scientists, seismic experts, farmers, geologists, electricians, chemists, and others. It is often said that if you are in business in the United States, you are in the energy business.

Today, the NEED program includes engaging curriculum materials, exciting professional development, turnkey assessment and evaluation tools, and high quality teacher support. NEED's long-term partnership with the U.S. Energy Information Administration provides the data and energy analysis used to update NEED curriculum materials on an annual basis. In addition, the partnership provides educational content for classroom curriculum materials and is the foundation for the EIA Kid's Page and the popular Energy Ant. NEED believes in recognizing and rewarding excellence, and the Youth Awards Program for Energy Achievement showcases the work of teachers and students dedicated to teaching and learning about energy in all its aspects.

NEED teaches the science of energy and provides objective information about conventional and emerging energy sources—their use and impact on the environment, economy, and society. NEED educates teachers, students, families, and the general public about energy consumption, efficiency and conservation and provides tools to help educators, energy managers, and consumers use energy wisely.



In our state-wide criterion-based testing last year, there was an objective question dealing with renewable and nonrenewable sources. The mean percent getting it correct for the **state** was 48%, for the **county** it was 64% and for **my classes** it was 83%!!!! Thank you, NEED!

Linda Fonner,
New Martinsville School, WV

NEED understands the needs of the classroom teacher. Materials meet, align, and exceed the National Science Education Content Standards and state standards. Educators who use NEED materials report that their students score better on end-of-grade testing, are more actively engaged in learning, and develop leadership skills as members of the community.

NEED believes in the power of a Kids Teaching Kids approach to an expanded knowledge of energy. Students learn about energy by teaching their peers and their parents. They learn by doing. Students build circuits and batteries, they construct geologic models and they drill for oil and natural gas. Students audit school buildings and make recommendations for energy improvements. They design photovoltaic installations for their schools. NEED students do. They learn and they apply their knowledge.

NEED partners with organizations and companies that believe in the value of energy education and smart energy decision-making. From major multi-national energy companies to local wind and solar installers, our partners and sponsors are dedicated to the preparation of tomorrow's workforce using comprehensive, science-based energy information and curriculum. Every partnership considers an energy literate public the pathway to overcoming the energy challenges of the future.

The Steps

The NEED curriculum is divided into eight steps; each builds on the others to form a comprehensive energy unit that encourages even the youngest students to understand how energy is involved in everything that happens in the world.

The Science of Energy

The curriculum begins with science and incorporates science into all of its materials. Students at all grade levels learn about the science of energy—heat, light, motion, sound, nuclear energy, and electricity—with age-appropriate, hands-on explorations that emphasize the scientific process and experimental design.

Sources of Energy

The NEED curriculum provides comprehensive, objective information and activities on the energy sources that power our country, including their economic and environmental impacts. They explore the history of energy, energy in current events, and consider future energy opportunities and challenges.

Electricity

NEED students learn about atoms and the particles that make up atoms. They learn about electrons and how they move; they build batteries and electromagnets. They explore circuits and learn how electricity is generated and measured. They delve into fusion and fission, photovoltaics and superconductors, deregulation, green pricing, and politics.

Students consider clean-coal technologies, renewables, and natural gas cogeneration. They research nuclear energy as an option for generating the nation's electricity. They learn how hydrogen may someday impact distributed generation and how fuel cells can provide uninterrupted power to buildings. They use the new Hydropower Curriculum sponsored by the Hydropower Research Foundation to learn about harnessing the energy of moving water in rivers and in the ocean.

Transportation

NEED's transportation materials cover the transportation fuels and vehicles in use today and the fuels and vehicles of the future. Students learn about popular fuels such as gasoline, diesel, ethanol, and biodiesel. Students learn about hydrogen with the DOE-sponsored *H₂ Educate* curriculum and expand their knowledge of petroleum and its uses with the *Fossil Fuels to Products* curriculum, sponsored by the Center for the Advancement of Process Technology.

Efficiency & Conservation

Learning to use energy wisely is an important component of the NEED program. Students learn to read utility meters, use light meters, investigate phantom loads, and evaluate information from EnergyGuide labels. They learn about caulking, weather-stripping, and programmable thermostats. They monitor energy consumption and explore ways to reduce it—like using ENERGY STAR® products at home and at school. Students and their families participate in the *Change a Light, Change the World* campaign.





Teachers asked for a module on climate change and NEED will release an expanded Climate Change Curriculum this fall. It includes work from the Carbon Mitigation Institute at Princeton University and was supported by a grant from the Dominion Foundation.

Synthesis

NEED's curriculum includes many activities to help synthesize energy information and create valuable connections between science, students' daily lives, and the entire world.

Evaluation

NEED has a Teacher Advisory Board of outstanding educators and an advisory board of energy experts to review NEED materials for scientific accuracy, comprehensiveness, objectivity, educational soundness and effectiveness. NEED participants—students, educators, sponsors, and partners—evaluate materials and training programs, as well as new activities. Using evaluation tools included with every unit, teachers evaluate individual activities and the entire NEED program. In addition, NEED provides a variety of assessment instruments and tools for measuring student knowledge and performance.

Recognition

NEED encourages and rewards student leadership and innovation by sponsoring a Youth Awards Program for Energy Achievement. Many schools participating in NEED's programs submit reports on their energy activities. Outstanding teachers and student leaders are recognized for their efforts at the state level and are invited to attend NEED's National Recognition Ceremonies held each June in Washington, DC.

Professional Development

NEED trains teachers. Teachers continue to report that they do not receive adequate energy instruction in their college and university courses, yet state and national standards have significant sections devoted to the science of energy and to the

Network RESOURCES

Energy Exchange, Career Currents and www.need.org

NEED stays connected to its network via its newsletters—*Energy Exchange* and *Career Currents*—and a variety of resources and opportunities available on NEED's website, www.need.org, in addition to many outreach events each year. *Energy Exchange* provides teachers, students, and sponsors with information and activities about energy and exciting new technologies and discoveries. *Career Currents* exposes students to the diversity of energy careers. With over 23,000 readers, both newsletters are distributed bimonthly, and all issues are available on www.need.org. The NEED website houses a variety of teaching and learning tools for teachers and students—from online bibliographies to science experiments and the valuable Energy Infobooks. Our website helps bring the NEED community together.

energy resources used to provide electricity, transportation, and products. Working with education and energy advisors, NEED assembles professional development opportunities for teachers that not only educate, but also energize and excite. Teachers report leaving the workshops and conferences 'ready to take on the world' and 'teach science and energy in a more exciting way'.

NEED removes the fear of teaching energy and takes extra care to provide primary and elementary level teachers with age appropriate materials for use in the classroom without diluting the content delivered in one-day or five-day conferences.

As consumers and community members, teachers are a vital link in the process needed to make energy a priority at home, in the classroom, and in daily conversation. NEED believes in treating teachers as the professionals they are, and in making their time with NEED instructors valuable, entertaining and educational.

From one-day workshops to the five-day National Energy Conferences for Educators, NEED training provides teachers with many the opportunities to learn about energy—using NEED kits and materials to learn about the science of energy, sources of energy, electricity, transportation, and efficiency. Teachers interact and share ideas with their peers from their local communities and around the country. Speakers from local and national energy organizations share information about careers in the energy industry and the exciting energy technologies and concepts on the horizon.

NEED is proud to have teachers in the NEED network who have taught the curriculum and provided training for their peers for over 28 years. NEED is a community of educational professionals dedicated to teaching energy and improving the quality of energy education nationwide.

The educators, students, board members, state coordinators, sponsors, and community partners who support the program say that working with NEED is one of the most rewarding things about their jobs. The NEED network provides the energy necessary for growth, expansion, and the delivery of high quality curriculum and training. The members of the network are the reason for and the result of NEED's success.



Teacher ADVISORY BOARD

Teacher Advisory Board Vision Statement

In support of NEED, the national Teacher Advisory Board (TAB) is dedicated to developing and promoting standards-based energy curriculum and training.

SHELLY BAUMANN, Rockford, MI
CONSTANCE BEATTY, Kankakee, IL
SARA BROWNELL, Canyon Country, CA
AMY CONSTANT, Raleigh, NC
JOANNE COONS, Clifton Park, NY
REGINA DONOUR, Whitesburg, KY
DARREN FISHER, Houston, TX
DEBORAH FITTON, Cape Light Compact, MA
LINDA FONNER, New Martinsville, WV
MELANIE HARPER, Odessa, TX
VIOLA HENRY, Thaxton, VA

NEED Lead TEACHERS

NEED Lead Teachers are essential to the success and growth of the program. They conduct workshops and informational programs, meet with sponsors, and expand the program in many ways. With their training, their students, and their energy, they conduct hundreds of NEED programs each year. The NEED Project appreciates and recognizes these outstanding teachers for their energy and dedication.

Shelly Baumann

North Rockford Middle School—Rockford, MI

Constance Beatty

Kennedy Middle School—Kankakee, IL

Scott Burch

Mount Tabor Elementary School—New Albany, IN

Loree Burroughs

Lake Don Pedro Elementary—La Grange, CA

Cape Light Compact Teacher Advisory Board

Cape Cod, MA

Joseph Caravella

TransOptions—Cedar Knolls, NJ

Nancy Chandler

Maine Public Service Company—Presque Isle, ME

Jean Clement

Russell County Middle School—Russell Springs, KY

Amy Constant

Fox Road Elementary School—Raleigh, NC

Joanne Coons

Shenendehowa High School—Clifton Park, NY

Nina Corley

Satori School—Galveston, TX

Lisa Davis

University of Nevada Las Vegas—Las Vegas, NV

Regina Donour

Letcher High School—Letcher, KY

Todd Ensign

NASA Education Resource Center—Fairmont, WV

Debbie Fitton

Cape Light Compact—Barnstable, MA

Linda Fonner

New Martinsville School—New Martinsville, WV

Mary Lou Green

St. Isidore School—Columbus, NE

Barbara Groves

Cache LA Poudre Junior High School—LaPorte, CO

Viola Henry

Thaxton Elementary School—Thaxton, VA

Beverly Hensley

Jesse D. Lay Elementary School—Barbourville, KY

Bob Hodash

Sierra Middle School—Bakersfield, CA

Greg Holman

Evergreen 6th Grade—Paradise, CA

Sheila Hopkins

Park View Middle School—Providence, RI

Cathy Horne

Wake County Public Schools—Raleigh, NC

LINDA HUTTON, Kitty Hawk, NC

DOUG KEATON, Russell, KY

BARBARA LAZAR, Albuquerque, NM

ROBERT LAZAR, Albuquerque, NM

HALLIE MILLS, Bonney Lake, WA

MOLLIE MUKHAMEDOV, Port St. Lucie, FL

DON PRUETT, Sumner, WA

LARRY RICHARDS, Eaton, IN

BARRY SCOTT, Stockton, CA

JOANNE SPAZIANO, Cranston, RI

GINA SPENCER, Virginia Beach, VA

TOM SPENCER, Chesapeake, VA

NANCY STANLEY, Pensacola, FL

SCOTT SUTHERLAND, Providence, RI

ROBIN THACKER, Henderson, KY

DORIS TOMAS, Rosenberg, TX

PATRICIA UNDERWOOD, Anchorage, AK

JIM WILKIE, Long Beach, CA

CAROLYN WUEST, Pensacola, FL

DEBBY YERKES, Ohio Energy Project, OH

WAYNE YONKELOWITZ, Fayetteville, WV

Doug Keaton

Russell Area Technology Center—Russell, KY

Kim Jenkins

Harrison County Middle School—Cynthiana, KY

Rick Johnson

Grantfork Elementary School—Highland, IL

Robert Jones

Kenney Middle School—Hannibal, NY

Constance Josvai

John F. Kennedy Elementary School—Manistee, MI

Vernon Kimball

Bayfield High School—Bayfield, CO

Steve Kosmos

Grosse Pointe North High School—Grosse Pointe Woods, MI

Christina Larkins

Wake County Public Schools EnergySavers—Raleigh, NC

Barbara Lazar

Hoover Middle School—Albuquerque, NM

Robert Lazar

Cleveland Middle School—Albuquerque, NM

Diana Luscher

Nebraska Public Power District—Columbus, NE

Hallie Mills

Emerald Hills Elementary School—Bonney Lake, WA

Jeri Preddy

Wake County Public Schools—Raleigh, NC

Don Pruett

Sumner High School—Sumner, WA

Donna Quillen

Parkwood Middle School—Monroe, NC

Kim Reber

St. Vincent School—Fort Wayne, IN

Judy Reeves

St. Margaret Catholic School—Lake Charles, LA

Renee Roddick

Forestville Elementary—Raleigh, NC

Joy Sloan

Briscoe Junior High School—Richmond, TX

Joanne Spaziano

Park View Middle School—Cranston, RI

Gina Spencer

Pembroke Elementary School—Virginia Beach, VA

Thomas Spencer

Chesapeake Center for Science and Technology—Chesapeake, VA

Nancy Stanley

Escambia County Schools—Pensacola, FL

Caryn Sugden

Greenwood Community High School—Greenwood, IN

Mike Tally

Wake County Public Schools—Raleigh, NC

Megan Thoma

Hope High School—Providence, RI

Patty Underwood

Inlet View Elementary School—Anchorage, AK

Aaron Vanderwerff

San Lorenzo High School—San Lorenzo, CA

Guy Wall

Indiana University Southeast—New Albany, IN

Judy Wall

Corydon Central Junior High School—Corydon, IN

Jim Wilkie

Hill Classical Middle School—Long Beach, CA

Carolyn Wuest

Escambia County Schools—Pensacola, FL

Wayne Yonkelowitz

Fayetteville Middle School—Fayetteville, WV



Youth AWARDS

All NEED schools have classroom-based programs in which students learn about energy. Many schools have teachers and student leaders who extend their activities to other students, their families, and communities. To recognize outstanding achievement and reward student leadership, the NEED Project conducts the National Youth Awards Program for Energy Achievement. Students and their teachers set goals and objectives, and keep records of their activities. Students compile their materials into scrapbooks and send them to their state coordinators.

State panels review the projects, select winners, and send those reports on to national headquarters. A national review panel evaluates the state winners and selects national winners in primary, elementary, junior, and senior categories, as well as choosing rookie of the year winners and special category winners for community colleges, youth clubs, school districts, and home school networks. NEED is proud to recognize the schools and students that are sharing their energy knowledge with their communities and leading the way toward changing the world.

Youth Awards SPONSORS

U.S. DEPARTMENT OF ENERGY

U.S. DEPARTMENT OF THE INTERIOR -
MINERALS MANAGEMENT SERVICE

U.S. DEPARTMENT OF THE INTERIOR -
BUREAU OF LAND MANAGEMENT

AMERICAN ELECTRIC POWER

BP

CONOCOPHILLIPS

DOMINION

ENERGY AND MINERAL LAW FOUNDATION

HALLIBURTON

NATIONAL OCEAN INDUSTRIES
ASSOCIATION

SAUDI ARAMCO

U.S. ENERGY INFORMATION
ADMINISTRATION



2008 Youth Awards REVIEW PANEL

STEPHAN GRAHAM

Office of Science, U.S. Department of Energy

STACY MACINTYRE

Energy Information Administration
U.S. Department of Energy

COLLEEN BLESSING

Energy Information Administration
U.S. Department of Energy

MELINDA HOBBS

Energy Information Administration
U.S. Department of Energy

CLAUDIA HERNANDEZ

Energy Information Administration
U.S. Department of Energy

JOELLE MICHAELS

Energy Information Administration
U.S. Department of Energy

BLANCHE SHEINKOPF

The Sheinkopf Group

MICHELLE NEW

National Association of State Energy Officials

JOHN WEINER

NEED Board of Directors
U.S. Department of Energy (retired)

COURTNEY TEMPLE

U.S. House of Representatives Staff



Student Leader OF THE YEAR



You'll never see him with a frown on his face, you'll never experience a negative attitude from him, but you will always know that he is committed to energy and to energy education. It is this attitude toward life and his education that makes Ryan Flynn the 2008 NEED Student Leader of the Year. Ryan is an energetic student leader who has dedicated countless hours, days, and weeks to expanding NEED's impact in his local community, throughout Rhode Island, and across the United States.

Ryan began his involvement with NEED in his freshman year at Scituate High School with the support of NEED Lead Teacher Shannon Donovan. Over the past four years, Ryan has contributed hundreds of hours of his time to educating his school, his community and students from all over the country about energy. As a founding member, Ryan has served as a leader in his school's Energy Club and has reached beyond the classroom to help present material at NEED workshops in his area. During his summers, Ryan has been a participant in the NEED Youth Awards for Energy Achievement as an award winner, and now serves as a Youth Staff member for the program.

In May 2008, Ryan gave an address to the Environmental Council of Rhode Island as he accepted the John H. Chafee Conservation Leadership Award on behalf of the Scituate Energy Club. Although Ryan graduates from Scituate High School this June, he will serve as a mentor to the Scituate Energy Club. Ryan is also one of the recipients of the 2008 Youth Energy Leadership Award that is awarded annually to college students who have made a committed effort to bring energy education to their communities and plan to enter careers in energy or education. His experiences with NEED and energy sparked a personal interest to learn about non-traditional forms of energy and engineering. We know that Ryan can continue to harness his energy as he begins his studies in Engineering at the University of Rhode Island in the fall of 2008. Congratulations Ryan!

I just have to tell you something—this weekend I was looking through some materials to find measurement lessons and happened to come across the Teacher Guide for the Primary Science of Energy Kit. It was exactly what I was looking for. We have been using the kit all week during math class—it is wonderful, fantastic, SUPER DUPER! The kids have loved math this week.

Mary Funk,
Burrell Union Elementary School, CA

Distinguished SERVICE AWARDS



VIOLA HENRY

It is with gratitude that NEED honors Viola Henry of Thaxton Elementary School in Bedford County, Virginia as a recipient of the 2008 Distinguished Service Award. Over the past 16 years, Viola has been a fixture in NEED programs in Virginia, providing her time, knowledge, and calm sensible ideas to energy education. Viola exemplifies NEED's Kids Teaching Kids approach, often saying, "I just set it up and let the kids do it and they are great at it." Many times she has been heard to say, "You know it is all about the students here at Thaxton." Viola's classroom is one that anyone with a passion for learning and for working with students would like to visit. There is energy being taught in the classroom and a great energy in the classroom, too.

Her work has not stayed within the boundaries of the school in which she teaches – it thrives and reaches beyond. As a certified NEED trainer, she has facilitated workshops in Virginia and has taken her students across the Commonwealth to teach others about energy. Most Virginia energy organizations and companies know Viola and call upon the Thaxton students, teachers, and parents whenever there is a need for energy education at local fairs, energy conferences, and events. Virginians are smarter about energy because of her work and the work she inspires in her students. Viola joins the NEED Teacher Advisory Board this year, providing her expertise to NEED as we grow.

Viola's passion for teaching has been supported by her loving husband of 33 years, Allen Henry, and her two lovely daughters - Alina and Jessica - who have also participated in NEED programs over the years. Viola recently said, "NEED seems to get ideas and



sparks started that grow and glow into something spectacular. It causes my students to focus on goals, to become more independent and confident, and to consider ways to improve and protect their local environment and, in turn, make a great impact locally and globally. My students have learned how to give back to the community."

It is no surprise that many of Viola's students leave Thaxton energized about pursuing careers in energy and environmental science after graduation. She is a friend, an inspiration, and a true NEED Leader. Congratulations Viola!

This is an excellent set of activities. The students enjoyed teaching. They are asking when they will be able to teach again. I plan to revamp other units to include students teaching students.

Elementary Science of Energy Kit
5th grade teacher
IN

IRENE A. BROWN

Director – National Programs and
Constituency Relations, BP America Inc.

Irene A. Brown currently serves as Director, National Programs and Constituency Relations at BP America, Inc. In this newly created position, Brown is responsible for development and expansion of programs working in consultation with the various Government and Public Affairs teams and for handling Reputation team activities. Irene is the convener of the community affairs and programs network with the goal of sharing best practices in North America. She also serves as BP's liaison to major national constituency organizations.

Brown's extensive career in philanthropy and community relations spans nearly two decades and encompasses national and international scope reaching over 100 countries. She is an invaluable resource to corporate senior management on community service involvement.

Most recently, Brown was on staff with the BP Foundation at BP p.l.c. Her tenure with the Foundation exceeded 17 years, culminating as the Executive Director. In this role, she oversaw the Foundation's daily operations and provided leadership and direction to shape Foundation policy, programs and contributions. She also functioned as Senior Business Advisor–Global Social Investment, for the Chicago/Midwest Region, in conjunction with her role as Executive Director, BP Foundation.

Brown is a renowned expert in community development and a master at program development and building partnerships with outside organizations and educational institutions. She works tirelessly to advance the cause of the philanthropic community through support of social investment programs by lending her considerable expertise to numerous local and national boards and committees. Her personal and professional contributions



have garnered the admiration and appreciation of numerous professional, civic, and philanthropic organizations, which have bestowed upon her various awards and commendations.

As the leader of the team that made the A+ for Energy Program a signature BP program, Irene listened to educators and created a program designed by teachers, for teachers. Today, the program provides cash grants, teacher training, and curriculum materials to teachers in California, Texas, Illinois, New Mexico, Ohio, Indiana, Alabama, and South Carolina. NEED is proud to be BP's Education Partner in the effort, as well as a partner in other educational endeavors throughout the BP community.

NEED is honored to recognize Irene, her achievements and dedication to energy education and to students.



NEED Youth LEADERSHIP AWARDS



BROOKE COWDEN

NEED congratulates Elizabeth Denise Brooke Cowden on being a 2008 Youth Energy Leadership Award winner. Brooke is a Biology Education major at Alice Lloyd College in Pippa Passes, Kentucky and has been an active NEED leader for the past five years. She has served as a NEED workshop facilitator for middle school teachers and students. Brooke's high school science teacher and NEED Lead Teacher, Regina Donour, said it best, "Brooke's greatest accomplishment is her commitment to working with other students to excel in their academic endeavors."

Even in high school, Brooke was a natural educator.



RICARDO EDWARDS

NEED congratulates Ricardo Edwards on being a 2008 Youth Energy Leadership Award winner. There are some students who grow up with NEED as part of their education for many years. There are other students who discover NEED and the importance of energy education toward the end of their education, but quickly wrap their arms around the idea and the mission of an energy educated society. Ricardo is part of energy education programming at Bloom High School. Bloom teacher Barry Latham received a BP A+ for Energy Grant to expand energy education at Bloom. Ricardo became a strong student leader in this effort.

Although Ricardo has only been involved with NEED for a short while, his work and passion for learning will serve as a guide for students who come after him. He may even win an Oscar one day! During his senior year, Ricardo filmed an interview on energy for the school community. His passion for filmmaking and energy was obvious when he explained, "The interview added something different. It was the message that a student could care about the school and learning about alternative energy."

This fall, Ricardo will continue to spread the message of energy education as he pursues a degree in film at Columbia College Chicago.

State of THE YEAR

OHIO

Congratulations! The Ohio Energy Project turns 20 this year! The Ohio Energy Project (OEP) has experienced another successful year, developing innovative methods to provide energy and leadership opportunities to students and teachers across Ohio. Through a grant that it received last year from the Ohio EPA/OEEF and Duke Energy, OEP provided 2,000 students with Home Energy Efficiency Kits and 5,000 students with CFL bulbs, resulting in significant savings on Ohio energy bills. By teaching energy saving behaviors and decision-making using these tools, OEP's Be E3 Smart (Energy Efficiency Education) Program empowered students and teachers to immediately conserve energy at home.

Similar to summers past, the number one professional development opportunity continues to be the Energy Sources Tour. During this energizing tour, teachers board a bus for several days to visit Ohio's energy sites, where they learn about various energy sources, their applications, and other science concepts. This coming year, OEP is excited to pilot a new program with the Ohio Department of Development for gifted high school students, highlighting science and leadership careers available in Ohio.

Major Sponsors: Duke Energy; Ohio Department of Development/ Office of Energy Efficiency; American Electric Power; Ohio EPA/



Ohio Environmental Education Fund; American Municipal Power and Member Communities; Westerville Electric Division; Worthington City Schools; Honda of America; Ohio Fuel Cell Coalition; Akron Community Foundation; NiSource/Columbia Gas, Toyota; Ohio Rural Electric Cooperatives; Martha Holden Jennings Foundation; Ohio Farm Bureau Foundation; FirstEnergy; Ohio Propane Education Research Council; U.S. Enrichment Corporation; Marathon Ashland Petroleum; Ohio Consumers Council; Industrial Energy Users; and Vectren.

District of THE YEAR

KENTON COUNTY SCHOOL DISTRICT

1055 Eaton Drive

Ft. Wright, KY 41017

(859) 344-8888

www.kenton.kyschools.us

Project Title: Wisdom is Saving Energy

Project Adviser: Chris Baker

Student Directors: Carson Elliot and Jenna Bach



Energy WISE (Wisdom is Saving Energy) is the Kenton County School District's Energy Program. It is designed to educate building occupants and the community about energy efficiency while reducing energy consumption in our schools. We have Energy WISE teams at all of our eighteen schools.

The Energy WISE program is based on three principles: monitoring, raising awareness, and educating. The teams monitor by patrolling the school, checking each room to see if energy is being wasted. They leave door hangers that either say 'Thank you for saving energy' or 'You're getting there'. The teams raise awareness by hosting energy assemblies, creating posters, and making announcements.

The teams first educate themselves about energy and how energy is used and wasted. Then they educate staff, other students and the community by hosting various events throughout the year such as the *Change a Light, Change the World* campaign, hosting family energy nights, and creating videos. As a result of our Energy WISE teams, the Kenton County School District has reduced energy consumption and enabled us to redirect those funds to education.

Primary Level SCHOOL OF THE YEAR

HUNTINGDON PRIMARY SCHOOL

191 Cox Street
Huntingdon, TN 38344
(731) 986-3091
www.huntingdonschools.org
Project Title: We All NEED Energy!
Project Adviser: Connie Bond
Student Directors: Wyatt Stokes and Mary Glenys Espey

The Wisar Miser Energy Team consisted of ten third grade students. We enjoyed exploring a variety of energy sources, teaching others about energy conservation, and learning to be leaders in our school and community. We all NEED energy!

We worked hard and had a fun and educational year. We went on six energy related tours, held after school meetings, learned work and environmental ethics, and participated in NEED activities. Our team raised more than \$6,700 with projects that included collecting and recycling aluminum cans, paper, plastic, cardboard, used cell phones, and ink and laser cartridges. We donated \$300 to PROJECT HELP, which provides help to needy families who can't pay their electric bills. We will also purchase an energy efficient water heater and CFL light bulbs valued at over \$350 for the Habitat House built in May 2008.



Our team received \$500 grants from Wal-Mart and the 3-Star Community program. By participating in the 3-Star Community program, our school will receive a \$1,500 ENERGY STAR grant. We also received matching grant funding from Huntingdon Recycling Center. We had fourteen energy speakers, celebrated America Recycles Day, and promoted ENERGY STAR's *Change a Light, Change the World* campaign.

Elementary Level SCHOOL OF THE YEAR

A.K. SUTER ELEMENTARY SCHOOL

501 E Pickens Avenue
Pensacola, FL 32503
(850) 595-6810
<http://old.escambia.k12.fl.us/schscnts/sute/index.htm>
Project Title: Energy Savers Spread the Word
Project Adviser: Deborah Pate
Student Directors: Julie Grissett and Jake McDaniel



This has been an energetic year for our Suter Energy Savers! We studied energy conservation and spread the word everywhere we could. Although we are a small school, we knew that we could make a huge difference by using the NEED program to achieve our goals.

This year we focused on solar energy. We used energy from the hot Florida sun to make solar thermometers and solar hotspots. Our favorite solar activity was making s'mores in our solar ovens. They were warm and gooey!

We studied the environment and learned about recycling. We took a field trip to the landfill to learn how to recycle, and then we started our own recycling program. We involved our community in our projects and wrote our governor about energy conservation.

We also teamed up with five Starbucks to educate our community about CFLs. We had an energy booth at our carnival, and we decorated grocery bags for a local business. We ended the year with a visit from Congressman Jeff Miller. We told him about the NEED Project and our energy projects. We even lobbied for energy reform. Wow! What a full year we've had! We certainly accomplished our goal to 'Spread the Word'.

Junior Level SCHOOL OF THE YEAR

ST. ISIDORE SCHOOL

3821 20th Street

Columbus, NE 68601

(402) 564-2604

Project Title: St. Isidore NEED Group

Project Adviser: Mary Lou Green

Student Directors: Allison Bos, Carly Burkhardt, Nicole Pauley, and Amy Price



Promoting the increased use of CFLs in our community has continued as an important part of our education. On October 3, 2007, we collected over 800 pledges at the local Hy-Vee, Wal-Mart, Super Saver, and Ace Hardware stores. The Energyfest sponsored by the Nebraska Public Power District also yielded many pledges. Our staff, students, and parents signed pledges and an update from Senator Stuthman informed us that the Capitol's bulb replacement with CFLs is on schedule. The annual shrimp peel again featured placemats with CFL pledges to be signed.

As an intermediate school, one of our goals was to promote energy education K-12. Our students contacted Scotus High School and checked with Mrs. Lahm regarding her NEED goals for this year. Peer teaching the NEED *Energy Carnival*, presenting plays, designing teachers' lessons, and listening to community energy speakers' presentations were part of our work.

Energy Fairs held by the kindergarten, fifth grade, and our own classes were wonderful culminating activities. Cleaning local areas designated by KEEP Columbus Beautiful, holding monthly paper drives, and writing radio blurbs and local newspaper articles all promoted the NEED goals. Developing energy education in our K-12 school system, we believe, will insure that we will live the NEED message for a lifetime.

Senior Level SCHOOL OF THE YEAR

FAYETTE ACADEMY

15090 Highway 64

Somerville, TN 38068

(901) 465-3241

Project Title: Lighting the Future

Project Adviser: Donna Burrus

Student Directors: Savannah Pierski and Sheila Kelley

Our region, the southeast, consumes more energy than any other part of the United States and has the poorest air quality. In order to make a difference, the Ecology Club set goals. We participated in many events, distributing energy information and 2700 CFL light bulbs, saving over one million pounds of CO₂ and conserving 75 percent more energy. Money to purchase these bulbs came from fundraisers, grants and donations.

We made major progress toward reaching our goals, establishing a recycling program, distributing CFL light bulbs, creating awareness by reaching 600,000 newspaper readers, establishing the school's first energy policy, networking with local and state legislators, reducing overall energy consumption, and establishing a high school club and elementary mentoring program.



We agree with the statement that the changes that are needed are not just a matter of tinkering at the edges, and they will not come if we simply listen to what we want to hear. All of us will be called upon to make some sacrifices. None of us will be exempt from responsibility. We will have to challenge ourselves to be better stewards of the land, acknowledge the deep-sided biases against change that still reside in our own communities and marshal the will to break their grip.



State PROGRAMS

The NEED Project offers programs to all fifty states, the District of Columbia, Guam, Puerto Rico, the U.S. Virgin Islands, and the Mariana Islands. State sponsors provide school districts and schools with workshops and in-services, classroom curriculum materials, NEED's hands-on kits, energy field trips and, in some cases, assistance with home energy efficiency and school energy management programs. State programs focus on the needs of local teachers and work with local energy interests and local, state, and federal energy agencies to provide unique educational experiences. Most important, state programs and NEED state coordinators work to create partnerships to expand programming to more teachers and students every year.

NEED works to develop and enrich state programs to meet its long-term goal of providing energy education resources to all educators who request them. Some state programs are smaller than others, and some have few resources available to them. NEED's national partners and sponsors endeavor each year to support local efforts.

NEED believes in a local approach to energy education because energy opportunities and challenges are often local in scope. NEED programs in Alaska provide different resources and experiences than those in Puerto Rico. All state programs are built on the foundation of quality energy education materials correlated to local, state, and national standards, and comprehensive teacher training to prepare and support classroom energy education efforts.

For more information about NEED state and national programs, contact Mary Spruill at 800-875-5029 or mspruill@need.org.

State CONTACTS



California

California NEED Project Pacific Gas and Electric Solar Schools Program

Contact: Barry Scott
1764 South Tuxedo Avenue
Stockton, CA 95204
TEL: (209) 482-5663
FAX: (209) 468-917
EMAIL: bscott@need.org

Florida

Florida NEED Project

Contact: Carolyn Wuest,
NEED Lead Teacher
Escambia County Schools
30 E Texar Drive
Pensacola, FL 32503
TEL: (850) 469-5607
FAX: (850) 469-5600
EMAIL: cwuest@escambia.k12.fl.us

Indiana

Indiana NEED Project

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PO Box 176055
Covington, KY 41017
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FAX: (859) 578-0316
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Kentucky

Kentucky NEED Project

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Covington, KY 41017
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Maine

Maine Energy Education Program

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Maine Public Service Company–NEED Programs

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Presque Isle, ME 04769
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Michigan

Michigan NEED Program

Contact: Keith Etheridge, Coordinator
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East Lansing, MI 48823
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EMAIL: ketheridge@need.org

Mississippi

Mississippi Development Authority– Energy Division

Contact: Lisa Campbell
501 N West Street
Jackson, MS 39205
TEL: (601) 359-6600
FAX: (601) 359-6642
EMAIL: lcampbell@mississippi.org

Missouri

Gateway Center for Resource Efficiency

Contact: Glenda Abney, Program
Manager
3617 Grandel Square
St. Louis, MO 63143
TEL: (314) 577-0288
FAX: (314) 577-0298
EMAIL: glenda.abney@mobot.org

Nebraska

Nebraska Public Power District

Contact: Diana Luscher, Energy Educator
900 Fourth Avenue, Box 2170
Kearney, NE 68847
TEL: (308) 236-2230
FAX: (308) 236-2284
EMAIL: dllusch@nppd.com

Thanks for the great 4-H training conference. This was by far the BEST conference I have attended. I appreciate all of your hard work to get this curriculum to us. I work with the materials at least 20 hours a week. I look forward to using the Science of Energy Kit at teacher in-service training. This should be a great way to get more teachers on board.

Sue Isbell

Sioux County Extension Agent, ND

Nevada

University of Nevada–Las Vegas

Contact: Lisa Davis
College of Business
4505 Maryland Parkway, Box 456031
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New York

New York NEED Project

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61 Albany Street
Cazenovia, NY 13035
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EMAIL: trogers@need.org

North Carolina

North Carolina NEED Project

Contact: Amy Constant
5504 Cardinal Grove Boulevard
Raleigh, NC 27616
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Ohio

Ohio Energy Project

Contact: Deb Yerkes, Executive Director
431 Ohio Pike, Suite 210
Cincinnati, OH 45255
TEL: (513) 688-1717
FAX: (513) 528-8272
EMAIL: swenergy@infinet.com
WEB: www.ohioenergy.org

Columbus Office

200 East Wilson Bridge
Worthington, OH 43085
TEL: (614) 785-1717
FAX: (614) 785-1731

Puerto Rico

Puerto Rico Energy Affairs Administration

Contact: Ariel Roman
PO Box 366147
San Juan, PR 00936
TEL: (787) 999-2200
FAX: (787) 999-2246
EMAIL: arielmh2001@yahoo.com

Rhode Island

Rhode Island State Energy Office

Contact: Julie Capobianco, Coordinator
Department of Administration
One Capitol Hill
Providence, RI 02908
TEL: (401) 222-3373
FAX: (401) 222-1260
EMAIL: juliec@gw.doa.state.ri.us

Tennessee

TEEN

Contact: Chyrall Dawson, Coordinator
Department of Economic and
Community Development, Energy
Division
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Nashville, TN 37243
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FAX: (615) 741-5070
EMAIL: cdawson@mail.state.tn.us

Virgin Islands

Virgin Island Energy Office

Contact: Leila Muller, Coordinator
200 Strand Street
Fredricksted, St. Croix, VI 00840
TEL: (340) 773-1080
FAX: (340) 772-006

State WINNERS

Alaska



Northern Lights ABC School

2424 E Dowling Road
Anchorage, AK 99515
(907) 742-7500

Project Title: Energypalooza!
Project Adviser: Tammy Black

Our class has been teaching the Anchorage community about energy as part of our NEED energy project. We set up an information table at a Lowe's Building Supply Store to collect signatures for the ENERGY STAR *Change a Light, Change the World* campaign and received 482 energy saving pledges.

At our *Energy Carnival*, over fifteen classes participated. We taught students how they can be NEED *Building Buddies* at school and home. The topics of our presentations included 'How to Save Energy and Save Money', and 'Our Alaskan Energy Plan'. We also made posters about different energy sources. Our local news station, Channel 2 News, broadcast these presentations. We also collected 517 student pledges and 203 family pledges at the *Energy Carnival*.

One of the parents from our class, Mr. Hughes, who works for ConocoPhillips, came to our classroom and talked about Alaska's oil and gas industry.

Partnership SPOTLIGHTS

U.S. DEPARTMENT OF THE INTERIOR

As a partner of both the Minerals Management Service and the Bureau of Land Management, NEED continues to support curriculum materials such as *Energy on Public Lands* and *Ocean Energy* and provides teacher workshops in key regions for MMS and BLM. Wind workshops were hosted in New York, Energy on Public Lands workshops were hosted in western states, and workshops about energy on the Outer Continental Shelf were hosted in Florida, California, North Carolina, and Alaska.

PACIFIC GAS AND ELECTRIC COMPANY

The PG&E Solar Schools Program continues to thrive in central and northern California. In 2007-2008, over 1000 educators received training at PG&E Solar Schools workshops. Participating teachers received NEED *Science of Energy Kits*, NEED *Solar Kits*, and the opportunity to apply for \$2,500 or \$5,000 Bright Ideas Grants and Pole-mounted Photovoltaic Systems. In 2008, a March Science Madness Conference was sponsored to provide teachers with training on the science of energy, wind, hydrogen and energy efficiency. Summer events are planned in collaboration with local PG&E energy facilities – providing participants with the opportunity to see energy in action.

California

Finalist Primary Level School of the Year URBITA ELEMENTARY SCHOOL

771 South J Street
San Bernardino, CA 92410
(909) 388-6488

Project Title: Energy Stars

Project Adviser: Linda Gregory

Student Directors: Taylor Ramirez, Travis Ramirez,
and Maya Valtierrez

We learned about energy this past year in Earth Savers. We learned how we use energy at home and at school. We found out about forms of energy like light, sound, and electricity. We learned about energy sources like fossil fuels and solar and wind energy, all of which are very important. We learned the difference between renewable and nonrenewable energy sources. Energy is important in our lives.

We taught other people about energy. We had an *Energy Fair* and showed other kids and adults how to save energy, how we get energy, and how we use it. We showed which resources are renewable and which are nonrenewable. Renewable is great! We are also going to share at the Earth Day Fair and Expo like we did last year.

We are helping our school and community save energy. We turn off lights and computers. We only use half our lights at school. We recycle paper, cans, plastic, and ink cartridges. CFL bulbs use less energy than incandescent bulbs and we are giving these away to people to save energy.

Earth Savers are Energy Stars!



State SPOTLIGHT

CALIFORNIA

Thanks to the support of Pacific Gas and Electric Company, BP's A+ for Energy Program, ConocoPhillips, the Sacramento Municipal Utility District (SMUD), the United States Department of the Interior, Bureau of Land Management and the United States Department of the Interior, Minerals Management Service, schools across California are energizing their classrooms. California students are learning about the science of energy, California's energy resources, wind and solar technologies, electric power, and energy efficiency and conservation. Some students make their own biodiesel, while others tour energy facilities and learn about the generation of electric power from natural gas, wind, and solar.

The PG&E sponsored March Science Madness event in Sacramento hosted over 100 educators for a day of hydrogen, wind, solar, and forms of energy, then concluded with a tour of the California Independent System Operator and one of the PG&E Solar Schools. The SMUD sponsored solar and hydrogen workshops help teachers incorporate solar education into their classrooms and help students understand the application of hydrogen and fuel cell technologies for power generation and transportation.

Workshops with the Minerals Management Service and the Bureau of Land Management provide teachers with the tools to teach about California's energy resources – both on shore and offshore.

NEED continues to grow in California with a great network of teachers, students, NEED trainers, and partners.

JAMES FOSHAY LEARNING CENTER

3751 S Harvard Boulevard

Los Angeles, CA 90018

(323) 373-2700

www.foshaylc.org

Project Title: Camp Energetic!

Project Adviser: Jennifer Trochez

Student Directors: Darwin Chavez, Sukeya Clark, Steven Pham, Moses Aubrey, and Jessica Patino



Camp Energetic! was held at Leo Carrillo State Park, Malibu, California. Camp Energetic! was a four-day, three-night outdoor camp for 4th and 5th graders where we learned about the ten energy sources. Ten student teams became experts on the energy sources, each team learning about one source and its chants, to present to others at camp. Special focus was placed on solar, wind, and hydropower. To learn about solar energy, we used solar ovens, UV light detecting beads, radiometers, and photovoltaic cells. To learn about wind and hydropower, we made windsocks and rain sticks, then learned songs to help us remember why and how wind and water are also energy sources.

We had so much fun at Camp Energetic! that we wanted to share what we had learned with others back at school. The campers taught the *Energy Chants* and energy source presentations to the 4th and 5th graders who didn't go on the trip. Then, as a group, we decided to adopt the kindergarten class and teach them about solar and wind energy, specifically that the sun is a source of energy that gives us heat and light and that wind energy is harnessed from moving air.



URBITA ELEMENTARY SCHOOL

771 South J Street

San Bernardino, CA 92410

(909) 388-6488

Project Title: Saving Energy Starts With Us!

Project Advisers: Andrea Schindler and Vanessa Fiacco

Student Directors: Amanda Ramirez, Brian Freeman, Christopher Cardenas, Amanda Ramirez, Kayla Belle, Scott, Freeman, and Brian Freeman

This year, we learned many ways to save and protect our environment. We learned how to recycle household waste by taking household waste products to hazardous waste facilities. We also learned how to save energy by using compact fluorescent light bulbs instead of incandescent. We also learned that it is important to recycle because trash that sits in landfills releases methane gas into the environment, contributing to the greenhouse effect and climate change.

We wrote and acted in our own movie to teach the students and parents at our school how to recycle correctly. Our principal was so inspired that she bought more grey trash cans so that we could separate the recyclables from the non-recyclable trash items. Next we researched energy saving topics and created a display board that we presented at our school energy fair to inform others how to effectively save energy and recycle. We will be taking our display boards to the upcoming energy fair in our community.

Elementary Level School of the Year A.K. SUTER ELEMENTARY SCHOOL

See page 22.

Finalist Elementary Rookie School of the Year FLORESTA ELEMENTARY SCHOOL

1501 SE Floresta Drive
Port St. Lucie, FL 34983
(772) 340-4755

www.stlucie.k12.fl.us/flo/index.htm

Project Title: Dolphins NEED Energy

Project Advisers: Tari Sexton, Donna DeVane, and
Mollie Mukhamedov

Student Directors: Jerome Moss, Aida Brumlop, Rasheed Qaem,
Danielle Finchum, Isabella Rodriguez, and Alyshia Hogan



We started our NEED Project in August 2007. We studied the *Energy Infobooks* and learned the differences between renewable and nonrenewable resources. We learned the *Energy Chants*. We worked with the solar panels to show how solar energy can make a fan rotate. Our 4th and 5th graders did the *Harry Spotter and the Quest for the Right Light* play and participated in the ENERGY STAR *Change a Light, Change the World* campaign. We had 109 pledges for 319 bulbs to be changed.

In our 5th grade classrooms, we worked on wind energy. We made pinwheels and used different wind speeds to see how fast the wind moved the pinwheel. We also did the *Wind Can Do Work* activity. We made wind vanes to investigate which way the wind was blowing. We performed the play *Harry Spotter and the Chamber of Windy Myths*, in which we learned where to put wind turbines. During our entire project we learned that wind comes from the uneven heating of the earth's surface.

We chose to do the wind project because Florida Power & Light plans to build wind turbines along our local beaches. There are people in our area who don't want these turbines. We are trying to teach everyone at our school and our families that wind turbines are good for our area, will help save money and natural resources, as well as help our environment.

Partnership SPOTLIGHTS

HYDROPOWER RESEARCH FOUNDATION AND NATIONAL HYDROPOWER ASSOCIATION

Students around the country have the opportunity to learn more about the energy of moving water with the new NEED hydropower curriculum modules supported by the Hydropower Research Foundation and the National Hydropower Association. NEED lead teachers are working together to create hydropower units at four levels designed to help students and teachers understand the science of hydropower.

SOCIETY OF PETROLEUM ENGINEERS AND THE OFFSHORE TECHNOLOGY CONFERENCE

NEED, SPE, and OTC trained over 180 educators in one-day workshops hosted at the 2008 Offshore Technology Conference in Houston, Texas, and at the 2007 Society of Petroleum Engineers Conference in Anaheim, California. The educators had the opportunity to tour the exhibits – ranging from helicopters, oil and gas equipment, and drilling technologies to new computer programs used to search and produce oil and gas.

Florida



J.H. WORKMAN MIDDLE SCHOOL

6299 Lanier Drive
Pensacola, FL 32504
(850) 494-5665

Project Title: Green is the Theme
Project Adviser: Andrea Hussey
Student Director: Luke Bosso

This year's Energjags project was busy! Our goals shared a common theme--the color green. Some goals focused on going green, while others helped us earn green. However, none of these goals would have been accomplished without energy. Let me explain. Kinetic energy let us pick up garbage from Pensacola's white sandy beaches. We felt a radiant glow from the students' faces as they purchased Holiday Grams to support their energy club. Thermal energy dug into our skin as we washed car after car to fund more projects. Solar energy fed itself into Workman's campus flowers during our campus cleanup.

Every Wednesday, I used electrical energy to get on TV and remind all participating teachers to extinguish their lights to conserve energy. Wow, that's a lot! Oh, man! I almost forgot. We also recycled over a thousand pounds of paper, plastic, aluminum, and cardboard. We sent off ink cartridges to be recycled. We made some radical t-shirts and hosted Cici's Pizza night. We still have big plans to make bags for grocery shopping. I mean, if going green is cool, then we're the coolest kids in school.

Indiana

Elementary Level Rookie School of the Year ST. RICHARD'S SCHOOL

33 East 33rd Street
Indianapolis, IN 46205
(317) 926-0425
www.strichardsschool.org
Project Title: Little Effort Big Return
Project Adviser: Peter Connallon
Student Directors: Zach Li and Andrew Hammond

This project was done by the 5th grade students at St. Richard's School. At the heart of the project was the idea that a little effort can make a big difference. This project used high and low tech. The high tech was the rental of an infrared camera to take thermal pictures of homes to help owners see their energy flaws. The low tech was the use of foam tape to weather strip all external doors on the school and church campus to reap a savings of \$3,165.95 over three months, which was verified by Citizen's Gas. This project was integrated across curricula and the students learned much more than energy conservation.



Kentucky



JAMES A. CAYWOOD SCHOOL

3300 Turkeyfoot Road
Edgewood, KY 41017
(859) 341-7062

Project Title: Changing the World...one CFL at a time
Project Advisers: Lisa Dern and Renee Topmiller
Student Directors: Kennedy Webster and Carson Elliott

Our main goal throughout this year was to educate the students, staff and community about ways to conserve energy and to inform them about ENERGY STAR's *Change a Light, Change the World* campaign.

The students completed various activities to convince families to switch from incandescent light bulbs to CFL light bulbs in their homes. The students created posters, wrote a speech and even dressed up as the two light bulb types to perform a song and dance. Our team was fortunate enough to present their information to our school, the school board, and even representatives from Duke Energy.

The students also had the privilege of working with engineers from Louisville, Kentucky to help design a new middle school building. The engineers created mock windows in a few classes at our school, then taught the girls how to use light meters to record the amount of natural light coming into the rooms. The team is continuing to record the data and send it to the engineers to help them further along their design process.

Throughout all of these activities, we were hoping to contribute to a better and brighter future.

State SPOTLIGHT

INDIANA

Duke Energy Indiana, American Electric Power and the Indiana Office of Energy and Defense Development partnered during the 2007-08 school year in support of the Indiana NEED program. During the HASTI (Hoosier Association of Science Teachers) annual conference held in Indianapolis in February, NEED facilitated a variety of workshops and hosted a booth. The Indiana Teacher Advisory Board also held their annual meeting to discuss the current program and brainstorm opportunities for future activities.

NEED Workshops were held across the state with a continued emphasis on energy management at home and at school. In January, the University of Indiana SE in New Albany invited NEED to facilitate a workshop with local teachers and pre-service education majors at the university. It was a great success, with both audiences enjoying the many NEED activities presented during the workshop.

The Home Energy Conservation Kits are again a popular component of the Indiana program, providing energy saving measures for 1,900 Indiana families. Using the NEED *Saving Energy at Home and School Kits*, teachers and students are learning much about being wise energy decision makers. The activities help the students to assess current energy behaviors and apply the knowledge they've acquired both at school and in their homes.

In 2007, the BP A+ for Energy program expanded to Lake and Porter Counties in NE Indiana. This program supports and rewards teachers who implement innovative energy education activities in their classrooms. Sixteen Indiana educators received grants for either \$5000 or \$10,000 and participated in a three-day A+ for Energy Educator Conference, facilitated by NEED.

WHITE'S TOWER ELEMENTARY SCHOOL

2977 Harris Pike
Independence, KY 41051
(859) 356-9668
Project Title: 'Aware' Cats
Project Adviser: Mary Waechter
Student Directors: Ellie Smith and Ali Frietch



Our goal this year was to provide energy awareness to our peers, school, and community. We feel we succeeded at teaching our school about energy and energy usage. Teachers and students developed a keen eye for energy.

Our team accomplished many goals this year. The team went to Cherokee Drug Shoppe and told customers about CFLs at Family Literacy Night. We also conducted energy audits every month and a plug load study to show how much energy our school appliances use. We helped our school conserve energy in many ways.

The Energy 'Aware' Cats have also planned Go Green Week—a week dedicated to energy. We will have a pep-rally to celebrate what the team has accomplished this year. The school will dress in as much green as we can, play some fun games and movies, and for the finale of the week, each grade will plant some sort of tree or flower to celebrate! We hope the week will make the students aware of how many tasks our school has succeeded in accomplishing.

State SPOTLIGHT

KENTUCKY

Energy management continues to be a major focus of the Kentucky NEED program. During the 2007-08 school year, in partnership with the Governor's Office of Energy Policy, there were two *Change a Light, Change the World* campaigns. In October, as part of our Energy Awareness activities, 33 schools and organizations received \$350 mini-grants to plan and facilitate *Change a Light, Change the World* projects in their schools and communities. During the spring Earth Week *Change a Light, Change the World* campaign, 27 groups received mini-grants. Grant recipients are encouraged to sign on as *Change a Light, Change the World* pledge drivers and have collected over 9000 pledges. Students from Picadome Elementary in Lexington helped launch the statewide campaign in October during the Governor's Conference on the Environment. In Northern Kentucky, students from Beech Grove Elementary and Ft. Wright Elementary partnered with Duke Energy Kentucky to launch that campaign.

The Energy Efficiency in the Home project, sponsored in Northern Kentucky by Duke Energy Kentucky, continues to be a success. Using the school building as a real life learning laboratory, students in Kenton and Campbell Counties learned how they can have a positive impact helping to reduce energy consumption in their schools. Students were provided with energy saving measures to help educate their families about energy efficiency in the home.

In partnership with the Kentucky Office of Renewable Energy and Energy Efficiency, Kentucky NEED hosted the sixth annual *High Performance - Sustainable Schools* workshop. This year's conference was held in Louisville and included a special track focusing on best practices for operations and maintenance of new and existing school buildings.

In June, the annual KY Energy Tour for educators was held. This week long field trip for educators is designed to give teachers the opportunity to learn firsthand about Kentucky's energy industry. With a focus on both renewable and nonrenewable energy, participants visited a landfill gas to electricity facility, biodiesel production site, coal-fired power plant, hydropower plant, historic coal camp, oil and gas production site, installations of wind and solar at a Kentucky school and two major recycling facilities. At one site, playground equipment is made from recycled milk jugs, while the second site is the world's largest aluminum can recycling plant.

SPONSORS: Governor's Office of Energy Policy; Duke Energy Kentucky; Equitable Foundation; Kentucky River Properties; DART Foundation; Kentucky Oil & Gas Association; and the Kentucky Clean Fuels Coalition.

PHILLIP A. SHARP MIDDLE SCHOOL

35 Wright Road
Butler, KY 41006
www.pendinton.kyschools.us
Project Title: Priorities - Don't take NO
Project Advisers: Cayeann Cowan and Pat Brownfield
Student Director: Samantha Steffen

Our project includes two major goals and several improvement projects. The two goals are to become a Kentucky Green and Healthy School and to reduce energy usage while creating environmental awareness with our students and staff.

We related our projects to our Energy Audit. The ENERGY STAR *Change a Light, Change the World* campaign was our first project. The energy savings based on pledges was 244,494 kilowatt-hours of electricity. Environmental benefits included prevention of 354,603 pounds of greenhouse gas emissions. Another spin-off of this audit related to energy conservation was something as simple as turning off computer monitors when computers are shut down each day.

Information from the Solid Waste Audit reinforced our beliefs in starting a recycling program for our school. We discussed, called in reinforcements for assistance, and decided 'Priorities - Don't Take NO' as we implemented a recycling program. After several years of no, we decided to take a stand.

The final part of the project is related to the Instructional Inventory. As educators in a small, rural district we are committed to providing the best education possible. Using authentic, real world instruction helps students understand their world, environment, and impact on our natural resources.



RUSSELL AREA TECH CENTER

705 Red Devil Lane
Russell, KY 41169
(606) 836-1256
Project Title: Renewable is Doable
Project Adviser: Doug Keaton
Student Directors: Shawn Stephens, Krista Miller, Jaron Bower, and Shyler Elkius

Our goal was to study alternative and renewable energy options using the *Science of Energy Kit*, as well as other materials. We decided on a three-year plan of action that would focus on a different renewable each year. Last year we had a conservation focus, and this year's focus was wind. Along with our focus on wind, we wanted to continue to raise general awareness of energy conservation and resources. We began with fossil fuels and a study of current energy resources. We made posters of these resources and did power points of them for presentation in the classroom.

To raise public awareness, we built a full scale, live action wind turbine and put it into operation. It is rated at 1 KW, stands 60 feet tall and operates in as little as 4.5 mph winds. We hope to connect this with solar next year.

We continued to demonstrate conservation with our CFL display attached to each of them. Once again we took this to Wal-Mart during the October Energy Awareness Campaign in connection with ENERGY STAR, and then we scheduled an electrical energy expo at the middle school and demonstrated projects to over 620 students in five days. In all we gave out over 1000 ENERGY STAR pledges and 2000 brochures on environmental awareness and CFL calculations.

We presented to the local middle school, high school, community college, business and industry, political leaders and representatives in our state and community. RENEWABLE is DOABLE!

Partnership SPOTLIGHTS

AMERICAN ELECTRIC POWER FOUNDATION

In 2007-2008, American Electric Power Foundation provided support for NEED to expand its offerings in Virginia, West Virginia, Oklahoma, Texas, Louisiana, and Arkansas. Teachers and students in these regions will benefit from additional NEED workshops and new classroom curriculum. In summer 2008, three-day teacher conferences in Virginia and Texas provided educators with the opportunity to learn about forms of energy, energy resources, and electricity generation.

AEP FOUNDATION – CHANGE-A-LIGHT

In 2008, the AEP Foundation provided a grant to NEED to reach 4th grade students throughout its eleven state system. NEED's guide to ENERGY STAR's *Change a Light, Change the World* program and a note to families about residential energy efficiency were included with energy efficient compact fluorescent bulbs to make a connection between energy at school and energy at home. For more information about the program, visit www.need.org/aepfoundation.

U.S. DEPARTMENT OF ENERGY – HYDROGEN, FUEL CELLS, AND INFRASTRUCTURE TECHNOLOGIES

Now in year four of the *H₂ Educate* program, the DOE hydrogen program has provided additional funding for expanded workshop offerings in several geographic regions. NEED works with local sponsors and partners to provide classroom curriculum materials about hydrogen, transportation technologies, and fuel cells to teachers nationwide.

Kentucky



Senior Level Rookie of the Year SOMERSET HIGH SCHOOL

301 College Street
Somerset, KY 42501
(606) 678-4721

Project Title: Bright Ideas

Project Adviser: Cindy Ham

Student Director: Deepa Patel

Somerset High School's Energy and Environmental Education Team (the E-Team) partnered with several community organizations during the 2007-08 school year. The accomplishments of the group included educating students from kindergarten through high school about energy concepts as well as energy conservation, not only in our school district's three schools, but to several students in surrounding school districts as well. We also were able to educate citizens of our community about energy conservation and efficiency.

By becoming an ENERGY STAR pledge driver for the *Change a Light, Change the World* campaign, we were able to participate in eight community events and distribute over 1,000 CFL light bulbs. During these events, we collected pledges from people who promised to change over 2,500 bulbs, which will lead to energy savings of more than \$67,000 in our community, as well as the reduction of 1,000,000 pounds of greenhouse gases being emitted. We were able to do this with the help of Somerset Community College, Kentucky Utilities, KY NEED, the Governor's Office of Energy Policy, PRIDE, and South Kentucky RECC. We feel that the activities we have completed have given our community some 'bright ideas' about how to save energy and help with some of our environmental issues.

District of the Year KENTON COUNTY SCHOOL DISTRICT

See page 21.

Louisiana

Finalist Junior Level School of the Year ST. MARGARET CATHOLIC SCHOOL

2510 Enterprise Boulevard
Lake Charles, LA 70601
(337) 436-7959

www.stmcs.com

Project Title: A Cleaner Today for a Greener Tomorrow

Project Adviser: Judy Reeves

Student Directors: Joe Vanchiere, Colin Broussard, J.P. O'Dowd, Madison Blackwell, Kelsey Elender, Jordan Saltzman, Austin Vidrine, Chris Cinoni, and Kelli Fontenot



Our club's theme this year was a 'Cleaner Today for a Greener Tomorrow'. We carried this throughout the school in various ways. We took on the Lexus Environmental Challenge to promote the environment and won 1st place in the nation for energy awareness in our community, state, and world. I feel the club's efforts this year have shown others that a small group can make a large impact.

We started off joining NEED in the ENERGY STAR *Change a Light, Change the World* campaign and reached our goal of 100 percent. We promoted it by making costumes and doing skits at community meetings; we were even questioned by the Mall

police. We brought the project into the classroom using a model to demonstrate CFL versus incandescent lighting and how much heat is generated. We finished this segment by presenting a play to elementary students and posting a segment on YouTube.

We did other activities dealing with the environment and finished them with 'Energy of our Future *Geaux Green*'. Our mayor proclaimed the month of March as Green Energy Month, and our senator commended our club on energy and environmental awareness. We helped to promote a program for Energy *Geaux Green* and worked with Agroelectric, our green power source in Louisiana.

Maine

VAN BUREN ELEMENTARY SCHOOL

110 School Drive
Van Buren, ME 04785
(207) 868-2733

Project Title: Energy - 6th Grade Project

Project Adviser: Janice Gereben

Student Directors: Erika Searles and Chantal Deveau



We worked extremely hard and learned many interesting things about energy. We studied different kinds of energy. We learned the importance of energy conservation and recycling. After we learned about energy, Mrs. Gereben told us that we would be teaching the students in grades pre-kindergarten through grade five about energy during our Energy Week, March 24-28. We had fun making the power point presentations. Every student in our 6th grade class taught a group of younger students. The presentations all turned out really good, even though we were a little nervous. This was a great experience; it gave us all more confidence to talk in front of a group.

Now came the part we have been looking forward to for many years, it would be our turn to put on the Energy Fair. It was a lot of work to design and build the games from recycled materials. We made up questions and rules for playing our games. Friday, March 28th was the big day and the students came in with their teachers. So many people came to see and play our energy games. Even high schools students came to play our games; they were impressed and told us of the fun they had when they put on the Energy Fair when they were in the 6th grade.

Our Energy Project helped us learn about energy and we believe helped lot of other people learn how to save energy and why it is so important. We hope everyone had as great a time as we did.

Massachusetts

EASTHAM ELEMENTARY SCHOOL

200 Schoolhouse Road
Eastham, MA 02642
(508) 255-0808
<http://nausetschools.org/eastham/>
Project Title: SYNERGY
Project Adviser: Maggie Brown
Student Directors: Sarah Wardlaw and Heather Spiegel

We started a science club called Synergy. This was a combination of the words science and energy. We liked the name so much we named the school newspaper that we started after the club name. We spend one day a week after school in the science club and most of us are also on the newspaper staff.

The newspaper is new this year and we get to choose the articles we want to write and what sections to feature. So far we have covered home energy conservation, wind, recycling and energy activities for the younger children. We did an energy use survey and had many people respond.



For the Energy Fair, we chose our topics, researched and conducted experiments after learning about the scientific method. It took us a couple of weeks to prepare for the fair and we invited all the classes. We ran the fair, which was tiring, but fun. We can't wait to hold another one.

Parents and friends were encouraged to bring in old light bulbs for CFL light bulbs and we sold energy efficient holiday lights. Now we are encouraging people to buy reusable grocery bags. We also recycled paper, cardboard and plastic. We collected a total of 10,000 pounds of trash. As a group of students, we are doing our part to help this town.

Finalist Junior Level School of the Year BOURNE MIDDLE SCHOOL

77 Waterhouse Road
Bourne, MA 02532
(508) 759-0690
www.bourne.k12.ma.us
Project Title: Energy and Education
Project Advisers: Cindy McCann and Laura Perry
Student Directors: Michael Doyle and Benjamin Haskell



The Bourne Middle School Energy Savers is an after school program offered to students in grades 5-8. It was started by a 5th grade teacher, Peggy McEvoy, three years ago. Currently, the program includes 13 students and is overseen by Cindy McCann, a 6th grade teacher, and Laura Perry, a special education teacher. The Energy Savers is supported by the school's principal, Ernest Frias.

The group's focus is to help educate staff, students and community members about ways we can work to improve our planet and conserve energy. We were able to organize many events this year with the assistance of the Cape Light Compact and its educational liaison, Debbie Fitton. We highlighted some of our events in our scrapbook. They included an *Energy Expo* for students, a solar panel birthday party, recycling bins for plastics, grocery bag collection, reusable shopping bag fundraiser, LED and CFL light sale, and a comic book for elementary age students.

Thank you for taking the time to celebrate the Bourne Middle School Energy Savers. We look forward to expanding on our successes next year.

CHATHAM MIDDLE SCHOOL

425 Crowell Road
Chatham, MA 02633
(508) 945-5148

www.chatham.k12.ma.us

Project Title: Chatham Energy Operation (Project C.E.O.)

Project Adviser: Annie Bassett

Student Directors: Lizzie Haskell, Max Arvidson,
Caitlyn Jearaold, Michael Mazulis, and Kjell Hemsteat



This whole experience with the energy club was fantastic. We did oodles to educate the teachers. We gave away free CFL light bulbs to the staff at CMS. All they had to do was sign our pledge to use one of our CFL bulbs. Our biggest event was the energy conference. It took us one and a half months to prepare for. We used science kits from Cape Light Compact, and did simple experiments. We taught teachers and students how to use the kits so they could teach students and other people how to use them. Before the energy conference, we practiced on other classrooms and showed them how the kits worked and they helped us to be more prepared for the actual conference.

We also did a plethora to educate the students of many communities. First, we switched energy consuming lights to LED lights on a high school bulletin board. We are doing a musical called Assignment Earth. It's about saving the earth one step at a time. The reason it is educating students is because in the play, there are elementary students and we tell them about our club.

Throughout the whole experience, we have also been educating the community. We sold LED Christmas lights in front of the Chamber of Commerce in the dead of winter. We will present our play to the community, do a beach cleanup, and create grocery bags to be distributed at the local market.

We look forward to educating more in the future.

CODMAN ACADEMY CHARTER PUBLIC SCHOOL

637 Washington Street
Dorchester, MA 02124
(617) 287-0700

www.codmanacademy.org

Project Title: The Energy Situation: Energy &
Conservation Physics

Project Adviser: Carrie-Anne Sherwood

Student Director: Monique Pabon

During the school year, our theme was energy and conservation. We, as a class, studied physics while looking at the energy crisis. We learned about energy transformations by teaching our fellow classmates using the *Science of Energy Kit*. We researched nonrenewable and renewable energy sources and created posters to use in our energy open studios. We played an Energy Choices Game and made visits to Green/ Alternative Energy facilities in such as Artists for Humanity, Union of Concerned Scientists, Lion Spring Farm, a wind turbine and a teacher's green home. We conducted interviews with the people at each facility to learn more.

To study how thermal energy is transferred through our homes, we created model cardboard homes and investigated different



factors that would affect the house's ability to "hold heat". We then collected our family's electric bills, and recorded data on our own personal energy use for one day to look at the choices we currently make. We then brainstormed ways to reduce energy use and shared these ideas with our school community.

We researched and created posters on different energy-relevant topics to share at our Energy Fair. As visitors attend our energy open studios, we will encourage them to sign the ENERGY STAR *Change a Light, Change the World* pledge. Over the course of the school year, we have gone over many energy related topics to help us better understand physics and our overall theme for the year of energy and conservation.

Michigan

Primary Level Rookie School of the Year JAMES MADISON ELEMENTARY SCHOOL

1309 Madison Road
Manistee, MI 49660
(231) 723-5212
www.honoredstudents.org
Project Title: The 3 Little Rs - Reduce, Reuse, Recycle
Project Adviser: Dana Dobis

This project started out as an introduction to the three Rs: reduce, reuse, and recycle. I wanted my kindergarteners from Madison Elementary in Michigan to be aware of all the waste there is in the world.

The students became engaged, enthusiastic learners with our paper recycling project. They wanted to do something like the Scholastic Book Clubs did—if a class read 100 books, Scholastic would save 100 acres of rain forest. We collaborated ways to involve the whole school and from this we started our own Green Team paper recycling project. Our classroom was in charge of collecting discarded papers from each room, weighing, graphing and boxing up the paper for the recycling trailer.



These kindergarteners are very excited about this project and remind each other to put the trash in the trash bin and the paper in the blue recycling bin. They look forward to bringing the blue bin from the class they are in charge of to be weighed and boxed up in our classroom.

I believe this project has fostered lifelong energy conservationists!

JOHN F. KENNEDY ELEMENTARY SCHOOL

610 East Parkdale Avenue
Manistee, MI 49660
(231) 723-9242
www.honoredstudents.com
Project Title: Going Green at John F. Kennedy Elementary!
Project Advisor: Constance Josvai
Student Directors: Syriah Dobis, Lexie Adams, Teddy DeVoe, Nicole Morski, Megan Wright, Savannah Hiipakka, and Makenzie Kretz



We are 25 fully charged fifth grade students who started the year learning about energy sources and their meanings in a fun way by playing our student-made Memory Games. We continued to be charged with energy by expanding John F. Kennedy's Recycling Programs to other schools in our district. Expanding our recycling programs to other schools allowed us to coordinate a new program in our district called Manistee Area Public School "Green Team".

We continued to be charged full of energy as we prepared our "Expert" Report Presentations to present in class and to have on display at our school and to use at our *Energy Carnivals*. As we continue charging towards our goals, we started an energy awareness program called "Are you an Energy Saver?" We got a charge out of catching people saving energy and giving them coupons for fluorescent light bulbs.

Our amps continue to increase as we plan to build and race cars using LEGOs. We will also educate ourselves and our peers on transformations of energy with NEED's *Science of Energy Kit*.

As others start to lose their charge, we will re-energize ourselves to host our *Energy Carnival* at the upcoming Michigan Energy Fair during the last weekend of June.

We hope to continue to stay fully charged by teaching others about energy and keeping our Green Team going for years to come. We hope others will continue to stay charged about energy and energy conservation too!

Mississippi

Finalist Primary Level School of the Year SOUTH PONTOTOC ATTENDANCE CENTER

1528 South Pontotoc Road

Pontotoc, MS 38863

(662) 489-5925

www.pcsdk12.ms.us

Project Title: Cougar Energy Detectives

Project Adviser: Jeanette Simmons

Student Directors: Nikki Waldo and Shelby Holloway



The Cougar Energy Detectives were sworn in early in the year to learn, teach, and collaborate with others. This year's energy case was kicked off by a high level official from the Mississippi Development Authority - Energy Division. We learned ways to conserve electricity and learned how to respect electricity using safety rules.

We visited the second and third grade classes to teach them about electricity through plays and activities. Visitors from a local university came to our class and taught us about biomass and discussed area wildlife and its role in our environment. We simulated mining for coal during science lab, and then we were able to visit a coal strip mine site located in a nearby county. We were fascinated by the high-powered energy of the huge machines. During our solar study, we learned how to cook with

solar ovens. We learned that crops could be used to make fuel. We were amazed that corn can power cars.

The Cougar Energy Detectives taught first graders how to use solar energy and explained why it is important to use clean energy sources such as wind and solar energy for the future of our earth. We taught them songs and played games on ways to save energy. We made mini-posters and displayed them in hallways to encourage everyone to become aware of and use good energy saving practices.

The Cougar Energy Detectives had a full and exciting year learning, teaching, experiencing, problem solving, and helping others to understand energy and how important conservation is to our environment.

Partnership SPOTLIGHT

THE ENERGY INFORMATION ADMINISTRATION

To ensure that teachers and students are working with accurate information, NEED materials are updated on a regular basis, using the latest data from the U.S. Energy Information Administration, as well as from a wide range of energy industry partners. In a special partnership with the Energy Information Administration, NEED helps make energy information and data available to students via the EIA Kid's Page website. In 2007, the Kid's Page was one of the most popular EIA products. Other curriculum and outreach projects include the Energy Ant Activity Book, a Teacher Guide to Oil Market Basics, the Kid's Page Scavenger Hunt, new Energy Timelines and more. Energy Ant and his travels have become

popular with NEED students everywhere.

In 2008, NEED and EIA will produce the Energy Education Resource Guide in an online format – providing teachers with quick access to many energy education resources. EIA's new Energy in Brief series provides teachers, students, and the general public with simple backgrounders on timely energy topics.

NEED continues to collaborate on the Energy Industry Study Program for EIA employees – creating a professional development program with speakers and site visits to deepen an understanding of the many facets of the energy industry.

Finalist Elementary Level School of the Year LILLIE BURNEY ELEMENTARY SCHOOL

901 Ida Avenue
Hattiesburg, MS 39401
(601) 582- 6366
[www.hpsd.k12.ms.us/portal/OurSchools/BurneyElementary/
tabid/96/Default.aspx](http://www.hpsd.k12.ms.us/portal/OurSchools/BurneyElementary/tabid/96/Default.aspx)
Project Title: Tigers Searching for Alternative Energy
Project Adviser: Margaret Aderholdt
Student Directors: A.J. Ashford, Joy Moore, and Willie Mitchell

Lillie Burney's 5th grade science classes pounced on the topic of energy. They started the year at the Energy Fair provided by the Mississippi Development Authority - Energy Division. They were next introduced to NASA's use of energy when the 'Vision of Space Exploration' toured our area. This exhibit helped them learn about energy of the future and excited them about careers using energy in space.

Students next took on the ENERGY STAR challenge of *Change a Light, Change the World*. They took pledges to families, and neighbors and were thrilled to enter 787 pledges.

One group teamed up with a first grade classroom to teach them about energy. Their teacher gave us high marks on our teaching and the children especially enjoyed the *Energy Chants*.

The 5th grade was challenged to invent something new that used energy, draw a picture that used energy, or make up a poem or song about energy. These projects were displayed in the central case in the school for all to see.

At the Energy Fair, the students manned centers where they taught students about energy. We had over 700 students from Hattiesburg School District come to our fair. Parents, community members, and district leaders attended the fair as well. We were pleased that WDAM-TV covered the fair with a viewership of over 282,000 people. The fair was also covered by our local newspaper *Hattiesburg American*, which has a readership of 150,000.



Finalist Senior Level Rookie of the Year WINGFIELD HIGH SCHOOL

1985 Scanlon Drive
Jackson, MS 39204
(601) 371-4350
Project Title: E4 (Encouraging Energy Efficiency Everyday)
Project Adviser: Madelene Loftin
Student Director: Chasyaw Jacobs

This was our first project for NEED. We set three goals. The first goal was to inform the community of the need to conserve energy. The second goal was to communicate the results to the community. The third goal was to research energy usage and conservation.

In an attempt to complete our first goal, we conducted a survey. Those of us who were assigned the task to administer and collect surveys did so. We counted, tallied, and analyzed data. We used the surveys to plan our FSAN sessions and 'Energized' play. We decided that parents needed to know easy ways to conserve energy. We conducted energy audits in our homes using a website. Our parents helped us input information about our houses and the website rated our homes for energy efficiency.

Our teacher assigned us research projects about alternative energy sources. We each created a power point presentation about a different type of energy. Our presentations were used in class and with other classes.

The entire executive team are juniors this year and we are looking forward to expanding and improving our NEED project for next year.

MADISON CENTRAL HIGH SCHOOL

1417 Highland Colony Parkway
Madison, MS 39110
(601) 856-7121
www.mcjags.com

Project Title: Infusing Energy and Ecology in the Classroom
Project Adviser: Ken Hackman
Student Director: Kaylyn Orr

Madison Central High School has 1,487 students enrolled in grades 10-12, and is one of the four largest public high schools in Mississippi. We have an excellent curriculum, committed educators and wonderful students.

The students at Madison Central were eager to take on the task of an ECO Tech Day for their NEED project. The mission of the program was to empower students to use emerging technologies that focus on environmental stewardship and energy efficiency.

ECO Tech involved the entire campus. The broadcast classes shot a video to promote ECO Tech Day. A Trash to Treasure contest was held. A tree planting project for the campus was conducted. A recycling program was initiated as part of our commitment to the objectives of the NEED program. Students also held a raffle for a 2008 Ford Escape Hybrid. Birdhouses were built to improve the campus habitat, a paperless classroom was instituted, and the importance of wetlands and reclamation of green spaces was demonstrated to campus administrators.

Madison Central students are committed to greener and more sustainable building practices. Already the community has seen the message of this new generation of young people that they want a clean planet.



Partnership SPOTLIGHTS

CONOCOPHILLIPS

ConocoPhillips and NEED have partnered to provide teachers in 24 cities across 15 states with curriculum and training opportunities. The workshop series presents a unique opportunity for classroom teachers (K-12) to learn about energy in a fun and exciting way! The workshops create awareness of today's energy challenges and the importance of using energy wisely. ConocoPhillips sponsors class-sets of *Energy Infobooks* and *Science of Energy Kits* for all participants. ConocoPhillips is an international, integrated energy company with interests around the world. To learn more about ConocoPhillips' thoughts about energy challenges and opportunities, go to www.conocophillips.com/energy. For more about the ConocoPhillips/NEED program, visit www.need.org/conocophillips.

ENCANA

In 2008, NEED is pleased to join EnCana to provide teacher workshops and curriculum materials to schools in Colorado. EnCana and NEED joined forces to assist teachers with science based curriculum and a new supplement detailing Colorado's natural gas resources and the careers in Colorado's natural gas industry. Six workshops will host over 240 educators and provide resources to many rural communities, as well as the Denver metropolitan area.

Nebraska

Junior Level School of the Year ST. ISIDORE SCHOOL

See page 23.

Nevada

SUE H. MORROW ELEMENTARY SCHOOL

1070 Featherwood Avenue
Henderson, NV 89015
(702) 799-3550
<http://ccsd.net/schools/morrow>
Project Title: Making the Connection with Energy Education
Project Adviser: Lena Cook
Student Directors: Cameron Kazel and Giovanni Venezia

ULIS NEWTON ELEMENTARY SCHOOL

571 Greenway Road
Henderson, NV 89015
(702) 799-0500
<http://ccsd.net/schools/newton>
Project Title: Making Connection with Energy Education
Project Adviser: Lena Cook
Student Directors: Dani Morris and Sabrina Mahe

Our first goal was to deepen our understanding of energy. Our class used *NEED Energy Infobooks* to compare and contrast renewable and nonrenewable energy sources. We constructed energy source exhibits and designed a Transparency Show to highlight major energy sources. Next, we examined transportation fuel facts and crafted exhibits that brought to light the economic and environmental impacts of various transportation fuels. We evaluated the advantages and disadvantages of fuels through debates.

Then we had the ability to use our energy knowledge in a new situation. We designed energy games and invited second graders to attend our 'Energy Game Day'. We showcased the *Energy Carnival* games at our annual school carnival. We participated in another annual school event called 'Family Fun Night'. We set up an ENERGY STAR Take the Pledge booth and held a campaign at school. We gave out CFL bulbs to those parents who signed and returned the pledge. A recycling survey was sent home to



encourage families to continue or begin curb-side recycling. 'The Energy Superheroes' was an energy video that was written and produced by students to summarize our understanding of renewable and nonrenewable energy sources.

We filmed PSAs to encourage our community to save energy by using CFL bulbs. Our commercial was aired on a local TV channel. We designed original fashions using recyclable materials and presented the Trash-Chic fashion show at the local mall. We submitted original work to a community Save the Environment art contest. Our posters were displayed at a grand opening celebration that featured Nevada's first solar powered community.

New Mexico

Finalist Elementary Rookie School of the Year MCKINLEY ELEMENTARY SCHOOL

1201 N Butler Avenue
Farmington, NM 87401
(505) 599-8607

Project Title: We're Watching You! The C.I.A Takes on Energy in Farmington!

Project Adviser: Erin Gockel

Student Directors: Liam Murry, McKenzie Jackson, Eli Lamb, and Alahana Jakeway



Have you ever seen 77 energy conscious fifth graders in one place? Well, that's us and we've been in action all year as the C.I.A. (Conservation In Action)!

After learning through NEED kits, including the *Science of Energy*, we researched energy sources and careers by listening to community members. We went on scavenger hunts, learning how to recycle and how to make our homes green. Reading electric meters and energy bills are no problem now that we have studied them.

During Energetic Friday lessons, we learned to teach others. We made our own homemade prizes and families became honorary

members of the C.I.A. by signing conservation contracts for our Energy Expo. Energy placemats were put in two restaurants inviting people to come to the Expo. Sharing PSAs on the intercom and a local radio station, bulletin boards, and wanted posters kept the school informed, as did our homemade energy movie about sources, conservation, and solar panels.

Our big event was installing solar panels on the roof of our school. Now that is cool! There's more to come. We will be joining the ENERGY STAR *Change a Light, Change the World* campaign, teaching others at the Earth Day Sustainabration, and hosting a solar energy afternoon at our children's museum. We are on our way to creating a conservation nation.

Partnership SPOTLIGHTS



BP'S A+ FOR ENERGY PROGRAM

In 2008, BP's A+ for Energy program expanded to include South Carolina. As BP's education partner, NEED co-hosts the A+ for Energy Educator Training Conferences each summer and provides selected curriculum materials to teachers receiving BP's \$5,000 and \$10,000 grants.

AMERICAN PETROLEUM INSTITUTE

NEED is pleased to have the support of the American Petroleum Institute's Houston Chapter. Each year, the chapter sponsors teachers to attend the NEED Energy Conferences for Educators – providing local teachers with the opportunity to integrate energy into their classrooms on a daily basis. Participating educators credit API for the energy they receive at the conference and for the great resources they have to use when they return to their classrooms in the fall.

New Mexico



CLEVELAND MIDDLE SCHOOL

6910 Natalie NE
Albuquerque, NM 87110
(505) 881-9227

Project Title: K2K - Kids Teaching Kids - Growing Energy Awareness in the Community

Project Adviser: Barbara Lazar and Robert Lazar

Student Directors: Hannah Parker, Brittany Portman, Jasmine Washington, and Anisa Mathson

The Energy STARS worked to grow knowledge about energy conservation and awareness throughout our school/ community. Our goal was to educate other students and ultimately our community about the exciting world of energy.

To spread awareness and develop our leadership, we:

- Conducted energy patrols and made energy awareness announcements;
- Learned and taught the *Science of Energy* and *Energy Works* kits; and
- Learned about sources through hands on activities and video conferencing.

Our school's awareness grew throughout the year with:

- Regular announcements of facts, tips, challenges, and jokes about conservation and efficiency;
- A culture of energy efficiency that has taken root as teachers and students expect it;
- Our energy club grew in student participation across all grades; and
- An energy bike was added as a kinesthetic means for understanding principles of energy.

Building a mentorship with elementary students that included:

- Working with a school that is not yet in the district energy program—so, we are building capacity through student leadership;
- Having older and younger students teaching others through shared experiences, including field trips; and
- Designing, painting, and displaying a mural that highlights energy in New Mexico.

All our efforts helped our school to save \$22,000 so far this year! The influence of our club has made a huge impact on how people view the importance of energy. Through this club and our activities and visibility in the community, we have helped the school and community to better understand energy in our lives and our world.

I had an assistant principal sit in on several of the lessons – she had asked to attend – and afterward she told me how much she both enjoyed and learned from the lessons.

Secondary Science of Energy Kit

Jeff Leben

Yonkers Middle/High School, NY

Partnership SPOTLIGHT

CHANGE A LIGHT, CHANGE THE WORLD CAMPAIGN

NEED continues its participation as a pledge driver in the ENERGY STAR *Change a Light, Change the World* Campaign. Reaching the goal of 1,000 pledges means that NEED and its teachers and students avoided 282,000 kWh of electricity and prevented 446,000 pounds of greenhouse gas emissions. In Kentucky, working with the Kentucky Office of Energy Policy, Kentucky NEED provided mini-grants to schools and organizations to expand their ENERGY STAR activities. The 2008-2009 campaign will be exciting at NEED with an expansion of the NEED guide and special events in many NEED states.



Junior Level Rookie School of the Year TAYLOR MIDDLE SCHOOL

700 South 11th Street
Lovington, NM 88260
(575) 739-2438

Project Title: Learn, Share, Service: Energy Kids at Work
Project Adviser: Susan Cunningham
Student Director: Olivia Rodriguez



The Taylor Middle School Energy Club students are doing a challenge to learn and teach as much as possible about energy. Our club's primary goal is to educate our peers, parents, and community about energy use and conservation.

Three of the ways we are meeting our club's goals are: We are learning about energy sources and conservation using the elementary *Science of Energy Kit* provided by the NEED Project; we are doing research via internet and interviews; and the TMS Energy Club is promoting the 'Let Lovington Know' campaign. We have created energy tip posters that are located around Lovington, radio public announcements, energy tips via community announcement board. This campaign is educating community members about energy. We are asking the community to participate in the *Change a Light, Change the World* challenge on the ENERGY STAR website.

We have included a service project as a club activity, Energy Buddies. In this activity the students adopt senior citizens or disabled individuals. The students adopt these individuals to change their light bulbs and heater filters. The Energy Buddy, senior citizen or disabled individual is given a business card with the student's name/ number, a brochure explaining about CFL use and safety, and one CFL light bulb. All the buddy has to do is call the student and let him/ her know that the light bulb and/or heater filter needs to be changed. The students and their parents go and change the light bulbs. The first light bulb is absolutely free.

North Carolina

Finalist Elementary Level School of the Year FORESTVILLE ROAD ELEMENTARY SCHOOL

100 Lawson Ridge Road
Knightdale, NC 27545
(919) 266-8487

Project Title: Saving With the S.T.A.R.S. (Students Teaching About Resources)

Project Adviser: Renee Roddick

Student Director: Taryn Hicks

The S.T.A.R. Kids soared through the school halls and our community to teach people what they could do to save energy. They participated in events such as the Fall Festival, Health and Science Fair, the Christmas Parade and the Spring Carnival. At these events, the students demonstrated energy experiments and set up games for their fellow students and local citizens. At the Fall Festival, they brought the ENERGY STAR *Change a Light, Change the World* campaign to our school. Parents, teachers, and students took the pledge to save energy.

Taryn, the S.T.A.R. Junior Advisor, participated in the EV challenge at the State Fair. She also worked on writing a children's coloring book about our energy sources, while Julianna (S.T.A.R. student) drew the pictures. The S.T.A.R. kids will continue working on the coloring book by developing games and activities that will be added.



We continued to do the FEED the BIN program. The S.T.A.R. Kids collected recyclable materials every Tuesday to keep the school from overflowing. Some of the S.T.A.R. kids gave presentations at a faculty meeting, giving an overview to teachers of our resources and why we need to recycle, what to recycle and what not to recycle.

We also had our energy patrol weekly, where we caught energy wasters and recognized energy savers. We loved going into the younger classrooms, where we did energy plays and activities with the students, teaching them how to save energy. We also provided energy and water tips on the morning announcements, where we taught the school to be green.

We have enjoyed working with the school and community, teaching them how to conserve our resources, recycle, reduce, and reuse.

Finalist Elementary Level School of the Year ROLESVILLE ELEMENTARY SCHOOL

307 S Main Street
Rolesville, NC 27571
(919) 554-8686

<http://rolesvillees.wcps.net>

Project Title: Cougar Conservers Contribute

Project Advisers: Alden Hanson and Meredith Barringer

Student Directors: Devyn Williams and Drew Van Onselder



First we learned about basic types of energy at our early morning meeting. We signed up for committees that were based on our goals for this year--like getting our group on our school website and teaching little kids. We started inspecting and recycling.

In October, we put a display in the hallway for Energy Awareness Month. In November, we started our newsletter called *The Cougar Conserver*. At the Health Fair, we gave away CFL bulbs if people signed the *Change a Light, Change the World* pledge online. In December, we gave out energy tips during the parade. In January, when the drought was at its worst, we learned new ways to conserve water and shared ideas. In February, our third newsletter came out. At our March meeting we decided to put on skits on energy conservation at the May fifth grade play. The skits will be like commercials. By April, we learned that we improved our recycling nearly 2,000 pounds. We also got Energy Savers on our school website. Coming up, we have our skits to work on, another newsletter to print, and we will record a water conservation song to show on the announcements for Earth Week.

This has been a fun experience for every kid.

FOX ROAD ELEMENTARY SCHOOL

7101 Fox Road
Raleigh, NC 27616
(919) 850-8845

<http://foxroad.wcpss.net>

Project Title: SWAT-cycling Energy

Project Adviser: Amy Constant

Student Directors: Phoebe Ortega and Mat LaGranke

We did a lot of things this year in Energy Club. Most of the things we did were based on saving water, energy and recycling. Teaching our community about water conservation gave us opportunities to learn many activities.

For recycling, we have people that wait in carpool, holding up posters saying we want your old phone books. We put other posters like that around the school to help lower grades get their parents to bring in old phone books.

For water, we created Student Water Audit Teams (also known as S.W.A.T. Like we did for recycling, we made posters for water conservation. Energy club members made figures that have to do with water with K'nex pieces.

We read the book *City of Ember*, which is about energy and light bulbs. We brought home CFL light bulbs and tried them out. Our parents and teachers made commitments to try out at least one of the CFL light bulbs. We had 151 *Change a Light, Change the World* pledges signed.



Finalist District of the Year WAKE COUNTY PUBLIC SCHOOLS

15551 Rock Quarry Road
Raleigh, NC 27610
(919) 856-3715

Project Title: Environmental Stewardship

Project Adviser: Christina Larkins

The EnergySavers Program is part of the Wake County Public School System's Environmental Stewardship Program that serves our communities' students, schools, and citizens by educating, leading, and guiding them to accept shared responsibility for environmental quality. The EnergySavers program takes a "kids teaching kids" approach and encourages students to teach their peers and community members about energy in fun and innovative ways. Through this program we aim to connect our future generations with the thought that a healthy planet means healthy people.

EnergySavers plays a vital role in the Wake County Public School System in terms of natural resource conservation and saving money on our utilities. Energy Savers helps the school system lower our energy and water consumption in these difficult times of drought and rising energy costs. The efforts of those students, teachers, and staff who participate in the EnergySavers Program have yielded tangible results.

EnergySavers is a proactive approach for students to engage in the fight against natural resource depletion. Students are responsible for a list of activities such as conducting energy and water audits. They also help to educate other students and staff in their schools on the importance of natural resource conservation by means of morning announcements, posters, conducting hands on experiments, participating in their local town parades, and many other activities. The students are also responsible for collecting and recycling their schools' paper, and they earn a money rebate for their school by collecting used ink jet cartridges from both school and home.

Since EnergySavers is a student driven program, they are given hands-on opportunities to learn the importance of our natural resources and to take responsibility for their own ecological footprint, while also educating those around them.

Finalist Primary Level School of the Year CENTRAL COLLEGE MAGNET SCHOOL

825 South Sunbury Road
Westerville, OH 43081
(614) 797-7030

www.westerville.k12.oh.us

Project Title: Our Energy Scrapbook

Project Adviser: Koleen Foley

Student Directors: Jake Halliwell and Charlie Bruzwell

Learning about our earth has been fun. We built clay models of the earth. We learned about the layers of the earth and the resources we get from the earth. We learned that some of these resources are renewable and some are nonrenewable. These resources give us energy.

We pretended to drill for oil. It was not easy to find oil in our earth. We studied oil spills and how they hurt nature. We tried to find ways to clean up oil spills.

Our Battelle Scientist, Mr. Held, built an electrical circuit with us. We learned how electrical energy lights up a bulb. We made wind



turbines and studied how wind can be used to give things power to move. We watched the sun change our energy beads different colors.

We know it is important to recycle. We take part in our school's recycling program. We decorated bags for Kroger to teach others about the need to take care of the earth.

Our fifth grade energy buddies invited us to an *Energy Carnival*. We were excited about that. Learning about energy and our earth is fun. Now we are trying to teach others about saving energy and helping our environment.

THREE RIVERS MIDDLE SCHOOL

8575 Bridgetown Road
Cleveland, OH 45002
(513) 467-3500

www.threeriversschools.org

Project Title: TRMS Energy Club

Project Advisers: Patti Detmer and Tina Cole

Student Directors: Sarah Fellingner, Andrew Branch, Elizabeth Lakamp, Josie Janszen, and Ryan Sandling



This year we did many energy projects, including the *Energy Carnival*, a bookmark contest, and weekly announcements on our video clipboard. We started a recycling program for plastic bottles, paper, aluminum cans, Meijer and Kroger bags, and made posters for two schools within our district giving energy information. We took a field trip to Miami Fort Power Plant, made placemats for an evening at Skyline Chili, washed cups for our classroom and used them the whole year, hosted a program about recycling called Crystal Clear, and every member of our class presented an energy project to the entire class. We also recycled tabs at our school for the Ronald McDonald House.

On this year's annual field trip, we went to Miami Fort Power Plant. At the Three Rivers District Showcase, we showed some energy experiments and did some demonstrations on sound energy. We showed an energy club video from one of the past years that made everyone laugh. We made energy placemats for Skyline. At the beginning of the year, we gave out a pre-test about energy. Later in the year, we gave the same test and most of the results skyrocketed.

Sue Magness from Hamilton County Waste Management met with the TRMS Energy Club to get us started with energy tips and advice. She gave us recycled pencils, color change pencils, solar powered calculators, energy notebooks, and energy wristbands.

In conclusion, we had to work very hard, but we still had fun. This has been a long journey and we know it is worth it.

Finalist Junior Level School of the Year HERITAGE MIDDLE SCHOOL

390 North Spring Road
Westerville, OH 43082
(614) 797-6600

www.westerville.k12.oh.us/heritage

Project Title: The Generators' Bright Ideas

Project Advisors: Nyescha Clayton, Lauanya Watkins, Jason Tucker, and Debbie Pellington

Student Directors: Chris Morelli and Allie Mellinger

The Heritage Energy Team, The Generators, focused on three main energy goals. Each activity was designed around a 'bright idea'. The bright ideas, highlighted by CFLs in our scrapbook, emphasize the main energy knowledge or theme accomplished for completed activities.

Our first goal was increasing our own energy education so we could then educate our school, homes, and the Westerville community on energy issues. Activities we completed included field trips to a nuclear reactor laboratory, a landfill, and a water treatment facility.

Our second goal was energy leadership and outreach. Activities included two energy fairs, developing a *Change a Light, Change the World* display, and having community members sign a pledge to try a CFL in their homes. Other activities included student designed energy placemats used at a restaurant for an energy day, school-wide energy announcements, and energy speech writing and presenting.

Our third goal was energy efficiency. Activities completed had positive impacts on energy efficient attitudes, behaviors and knowledge. We completed school and home energy lighting audits, a school-wide 'Go Green' contest, and distributed hundreds of compact florescent light bulbs throughout the year.

The Generators had many 'bright ideas' that resulted in a very successful and educational energy year!



ANDERSON HIGH SCHOOL

7560 Forest Road
Cincinnati, OH 45255
(513) 232-2772

www.learnaboutenergy.org

Project Title: Hey World, Don't Make it Bad. Reduce, Reuse, Recycle. And Make it Better.

Project Adviser: Jeff Rodriguez

Student Directors: Courtney Summer, Isabella Rose, and Karie Chamberlaw

The AHS NEED Club organized and directed many fun activities to make the entire community aware of the ways they can reduce, reuse, and recycle. As part of our 'Kids Teaching Kids' theme, we taught younger students at the OEP Energy Fair and conducted eight workshops in our district.

We entered ENERGY STAR's *Change a Light, Change the World* campaign. We energized teachers to ride the energy bike and reduce energy use by switching over to CFLs. Between the workshops and this project, we handed out over 300 CFLs! We also promoted reducing gas usage by encouraging student carpooling to school in our 'Make a Difference Day' activity. We encouraged recycling plastic bottles and aluminum cans at our school with our 'Battle of the Bottles' project.

We worked hard to communicate our goals to the students, the community, and the world. We made posters with facts about energy to hang around the school, and articles were published in the school newspaper and the community newspaper. The club's website, LearnAboutEnergy.org, continues to get over 200 unique visitors per day from around the world.

We continued our research with energy experiments, advertising, and marketing techniques. Examples include a Club promotional CD, solar and wind energy at AHS, hybrid car advertising and marketing, a geothermal home energy system brochure, and creation of an energy CD for preschool students. We investigated energy saving techniques with a home energy kit from Duke Energy.

Our club was extremely productive in getting our community involved in reducing, reusing and recycling. Make it better!

Finalist District of the Year WESTERVILLE ENERGY EDUCATION PARTNERSHIP

3030 South Otterbein Avenue
Westerville, OH 43081
(614) 797-6029
www.westerville.k12.oh.us
Project Title: Westerville's Top 10
Project Adviser: Chris Doolittle



Finalist Senior Level School of the Year LITTLE MIAMI HIGH SCHOOL

3001 US 2213
Morrow, OH 45012
(573) 899-3781

Project Title: Conserving with the Energy Stars
Project Adviser: Amy Aspenwall
Student Director: Lainey Mullin

With everyone focused on going green, students at Little Miami High School wanted to make a real difference in the carbon imprint of the students, parents and families in our district. We started by taking advantage of Duke Energy's complimentary compact fluorescent light bulbs. We attempted to distribute and track as many bulbs as possible. About 350 were given away to students and families in our area. Team members worked to help members of the community use home energy efficiency kits that included hot water temperature gauges, LED night lights, low flow faucet heads, CFL light bulbs, and water flow meters. Teachers were included by team members preparing an Earth Day teacher appreciation event. One team member and her family replaced their oil burning heating system with a corn pellet system that saved them over \$675 this winter alone.

Finally, in an effort to educate the kindergarten to third grade students, team members wrote and illustrated the children's book *Watts up with Watson*. Much like Flat Stanley, Watson is a CFL bulb character that discusses the importance of choosing our energy sources wisely. Students can copy Watson and take pictures of him at home with their families as they are working to make good energy choices.

Westerville City Schools is fortunate to have a partnership with the Westerville Electric Division, the City of Westerville, and the Ohio Energy Project. This multifaceted approach has created a comprehensive program that provides energy education to our elementary, middle, and high school children, in addition to our community.

It begins with the City of Westerville and the Westerville Electric Division. These organizations have provided funding to help support energy education at all levels of our schools. The Ohio Energy Project then provides ongoing training and support to teachers and students. Materials from the NEED Project assist us in the instruction. They know energy education is a key to the future. Educating our youth in all energy aspects—sources, conservation and awareness—helps create energy conscious adults. This partnership is an added benefit for our schools and community, because the Ohio Academic Content Standards in Science specifically identify energy education components we are required to teach.

The focus of the Westerville Energy Education Partnership for the 2007-08 school year was to promote energy efficiency in the City of Westerville energy education and student leadership programs. A new partnership this year was expanding the middle school program. The school district shifted their curriculum, moving all physical science content (including energy) into the sixth grade. Professional development to equip teachers and middle school energy programs was conducted.

Another integral part of the Westerville Energy Education Partnership was energy efficiency. Through the support of the Westerville Electric Division, the partnership distributed 2,376 compact fluorescent light bulbs to students, teachers, and community members.





Rookie District of the Year **WORTHINGTON ENERGY EDUCATION PROGRAM**

200 East Wilson Bridge Road
Worthington, OH 43085
Project Title: Worthington Energy Education Program
Project Adviser: Carol Damian

In the summer of 2006, Worthington City Schools was approved for a House Bill 264 school energy retrofit project. Tim Gerhing, Worthington facilities manager, included an energy education component to the project. This began a partnership with the Ohio Energy Project (OEP).

The theme of the program is 'Be Energy Smart at School'. The overriding goal is for students and teachers to become more deliberate about saving energy at school. The Worthington Energy Education Program works to accomplish that goal through the Ohio Academic Content Standards for physical science and technology.

Professional development kicked off the school year in August 2007 with workshops for 1st, 5th, 6th, and 7th grade teachers. All teachers received NEED curriculum and a bin of materials. Worthington Kilbourne Middle School technology teacher, Mike Miller, developed a mass production process to build Energy Transformation Boards. Two 'make and take' workshops were held in Worthington for 120 teachers from across the state.

OEP sponsored a 'Be Energy Smart at School' poster contest in October. District personnel judged over 500 student posters and selected grade level winners in 5th-7th grades. These winning posters were reproduced and distributed to all elementary and middle schools.

Several schools conducted school energy audits to determine the efficiency of their buildings. Students then made recommendations to the facilities department to make their schools more efficient.

Partnership SPOTLIGHTS

EL PASO NATURAL GAS/SOUTHERN NATURAL GAS

Teachers continue to ask about liquefied natural gas and NEED recognized a need to include more about LNG in the curriculum. Southern Natural Gas and El Paso Foundation agreed to support the development of an LNG curriculum module and teacher workshops about liquefied natural gas and its use for heating, cooling, and electricity generation, and the impact LNG has on local communities. The module is designed to highlight Southern Natural Gas Company's Elba Island LNG terminal and will be piloted with local schools in Savannah, Georgia.

TXU ENERGY SOLAR ACADEMY

The TXU Energy Solar Academy launched in 2008 with ten Texas school districts selected to receive photovoltaic installations, teacher training and NEED's hands-on solar kits. The program, modeled after the successful Pacific Gas and Electric Company Solar Schools Program, brings a comprehensive program to the classroom – the solar technology installed at the school, and the standards-based energy materials for the classroom. Over 300 teachers from Rockport to Dallas will be trained in fall 2008.



Rhode Island

PARK VIEW MIDDLE SCHOOL

25 Park View Boulevard

Cranston, RI 02910

(401) 270-8090

<http://cpsed.net/pview/>

Project Title: PV Cougars

Project Advisers: Sheila Hopkins, Joanne Spaziano, and Nancy DeCosta

Student Directors: Caitlin Souza, Sreyfov Ching, Caroline Henin, Xiao Ming Tang, Peter Myint, Vivian Myiant, Daivy Cedono, George Henin, Shu Ting Zhao, Linna Touch, Shu Chen, Emma Stanton, and Allison Miller



The PV NEED Cougars have had a busy year. We trained a new group of students and began to teach the new kids about energy sources, games, activities, and conservation. We trained for our conferences and gathered all the materials we would need. Our 8th graders directed the conferences from the beginning to the end.

We decided to donate money to our school for the Thanksgiving baskets. We held four conferences, had a NEED activities night, and presented at our Open House. We worked with our school to turn off lights and machines to save energy and money. We had

a NEED presentation at the ESL night. We presented *the Museum of Solid Waste and Energy* and worked at the Earth Day event at the Roger Williams Park Zoo.

Our advisers went to a conference to help us learn more about nuclear power. Our group consists mostly of students who are on the English as a Second Language team. We used the NEED activities to strengthen our oral and written skills. We estimate that we reached over 1,500 people directly through community involvement, school activities, and over 3,000 people throughout Cranston.

SCITUATE MIDDLE SCHOOL

94 Trimtown Road

North Scituate, RI 02857

(401) 647-4123

www.scituateri3.net/sms

Project Title: NEED Project

Project Adviser: Shannon Donovan

Student Director: Casey O'Conner



The Scituate Middle School NEED Project is a small, but growing group of young students interested in making their planet healthier for everyone. To do this, they spent time this year learning more about different types of renewable energy technology. Club members built wind and hydro turbines. They attended a training workshop held at Parkview Middle School. They participated in energy activities conducted by the high school NEED Project club. They are gearing up for their second year of competition in the Rhode Island Junior Solar Sprint.

SCITUATE HIGH SCHOOL

94 Trimtown Road
Scituate, RI 02857
(410) 647-4120

www.scituatehighschool.com

Project Title: Scituate High School NEED Project: Saving Energy, Improving our Future

Project Adviser: Shannon Donovan

Student Directors: Melysa Faria and Julie Killian



Students at Scituate High School organized and participated in many events this year to spread awareness about energy conservation. We attended a farmers market where we displayed information about energy conservation and student leadership opportunities through NEED. Some new club members attended a workshop at Park View Middle School.

This year, we hosted our first workshop for kids and teachers from any high school to come and learn more about the science of energy and NEED. We held the second annual Energy Night, where students displayed their energy conservation ideas to the community. Student leaders mentored middle school kids for the Junior Solar Sprint. We held two community contra dances, where we modeled how to have a green event.

Our sales of rain barrels and environmentally friendly cleaning products help us raise money and meet our energy conservation goals. The efforts of our student leaders are appreciated by members of the community as we were awarded a prestigious Senator John H. Chaffee Conservation Leadership Award from the Environmental Council of Rhode Island. With the help of our community partners, student leaders from Scituate High School have done their part to spread the word about energy conservation.

State SPOTLIGHT

RHODE ISLAND

Rhode Island may be a little state, but its commitment to energy education is big. With dedicated NEED teachers and students, workshops are held throughout the state each year and students conduct energy outreach at local community fairs, events, and conferences. The Rhode Island Solar Schools program connects teachers and students with solar installations, while Narragansett Electric – National Grid provides support for teachers and students to learn more about their energy use at home and at school and encourages students to reduce their energy consumption in the classroom and school using simple energy management tools and lessons.



Primary Level School of the Year HUNTINGDON PRIMARY SCHOOL

See Page 22.

BAILEY STATION ELEMENTARY SCHOOL

3435 Bailey Station
Collierville, TN 38017
(901) 853-6380

www.baileystation.scs.site.eboard.com

Project Title: Energizing Bailey Station Bears

Project Advisers: Carmen Hall, Melinda Ferrante, and Heather Kubitz

Student Directors: Rachel Hall and Collin McLeod

The primary goal of our 2007-2008 NEED project was to encourage awareness of forms of energy and energy conservation in our community and school.

Developing and implementing a before and after school science enrichment class allowed students the opportunity to design and explore electrical circuits. This hands-on learning experience received an overwhelming response from parents wanting their children to participate. Parent and student evaluations confirmed that the activity was a success.

Working with local community groups brought awareness to students, parents and the community of the need for recycling in today's ever changing world. Students enjoyed collecting, identifying and organizing materials for recycling.

Hands-on classroom lessons were designed to encourage students to explore forms of energy and how energy influences their daily lives. Student assessments showed these activities were successful in aiding retention of information. Grants were written to solicit funds to purchase energy activities for our school Science Lab for future hands-on experiences.

The 2007-2008 NEED Project was a success.



Finalist Junior Level School of the Year MOUNTAIN VIEW ELEMENTARY SCHOOL

145 County Road 627
Etowah, TN 37331

(423) 263-2498

Project Title: CSI: Conservation Student Investigators

Project Adviser: Becky Riley

Student Directors: Benjamin Riley, Macy Trotter, Chelcee Peel, Dominique Mayfield, and Moriah Giles

The MVS CSI (Conservation Student Investigators) are spying on energy hogs and converting them into 'green machines' by recycling all paper products, ink cartridges, and aluminum cans within our school. Our club traveled to the American Museum of Science and Energy to study nuclear energy, local utility sites to learn about water and waste water treatment, Watts Bar Nuclear and Hydroelectric Plant, and to view Habitat for Humanity solar panels at a job fair.

Our club holds many competitions focusing on energy and conservation including the bookmark and placemat contests, in which we had two state winners. McDonald's distributed over 1,000 winning placemats. Our 5th annual Energy War was a huge success, with three schools competing in an energy quiz bowl for 'the crown'. Our first annual photo contest was a hit as students and their families created original photos of either energy hogs or conservers. An afterschool program was designed to spread energy awareness and NEED's Kids Teaching Kids approach was both fun and rewarding.

By partnering with other energy experts, we earned grant money to promote conservation. Our grants include a \$1,500 3-Star Community grant for ENERGY STAR products, a \$12,000 Biodiesel grant, and a \$500 Outdoor Classroom grant. We also educated our community by hosting a booth at Fall Fest. Our efforts paid off by receiving the 'Friend of Conservation' award by Soil Conservation officials. Our four energy goals were met by educating club members, school students, community members, and families concerning current energy issues and taking appropriate actions. MVS Science Club conserves. Do you?

Senior Level School of the Year FAYETTE ACADEMY

See Page 23.

Finalist Senior Level School of the Year SCOTT HIGH SCHOOL

400 Scott High Drive
Huntsville, TN 37756
(423) 663-2801

<http://shs.scottcounty.net/>

Project Title: Scott High School Goes Green

Project Adviser: John Cannon

Student Director: Cassandra D. Byrge

At the start of the 2007-2008 school year, Scott High School obtained Tennessee 'Green School' status and our program took on several new projects that we felt were necessary to move to the next level. Students in the Technology Engineering Program began setting up a comprehensive school-recycling program. This collection program began in October of 2007 and is now in full swing.

Simultaneously, we assessed our solar energy program and began steps to increase battery storage and monitoring capabilities. It was also decided that making biodiesel in the laboratories was not enough and, with a new Agricultural Education teacher on the staff, it was decided that we needed to make much larger quantities of the fuel. With the help of a Perkins Reserve Grant, we purchased the equipment to enable us to produce enough



fuel to use in the school tractors and possibly some buses for energy centered field trips.

Early in 2008, the school obtained a wind turbine from the Tennessee Valley Authority and now is working on testing the turbine and erecting a 105-foot tower. In the two years we have been involved with the NEED program, we have seen energy awareness increase in our school and community. This summer we are planning on conducting a teacher in-service workshop, which will focus on teaching about alternative energy in the elementary schools within our school system, the availability of NEED materials to supplement this instruction, and the ability to bring young students to Scott High to see the solar panels and wind turbine.

State SPOTLIGHT



TEXAS

Texas teachers and students are enjoying more opportunities with NEED this year thanks to the support of ConocoPhillips, BP's A+ for Energy Program, the Society of Petroleum Engineers, the Offshore Technology Conference, Halliburton, and TXU Energy. NEED's partnership with the Houston Museum of Natural Science and the Offshore Energy Center provides teachers with additional resources and opportunities on a regular basis. In June 2008, 75 Houston area educators will attend the American Wind Energy Association sponsored Windpower 2008 teacher workshop hosted by NEED to learn more about the wind industry and receive hands-on wind materials.

Ten energy workshops were hosted statewide, with more planned for the 2008-2009 school year – including energy resources, solar, and hydrogen workshops. NEED continues to grow with the support of sponsors, dedicated NEED trainers, and the teachers and students who energize the program.

GREENBRIER INTERMEDIATE SCHOOL

1701 River Birch Run North
Chesapeake, VA 23320
(757) 578-7080

www.cpschools.com/Schools/GRI/

Project Title: Saving Energy Is What We NEED to Do!

Project Advisers: Karen Arnett and John Sammons

Student Directors: Aliyah Chandler, Kirsten Crichton,
Anthony D'Angelo, Austin Davis, Irum Khan, Becca Maigs,
Angelica Orlanda, Rayjon Ratliff, Logan Voorhees, and
Clayton Ward



The people of Greenbrier Intermediate School had a major problem. They were consuming too much energy and paying money that they didn't have for it. But their problem soon disappeared with the help of a disguised, secret alliance for saving energy. Each week, when all of the teachers were gone from their domains, the LEGO team would audit their classrooms to see if they were wasting or consuming too much energy. The LEGO team looked to see if computers, lights, heaters, printers, and lamps were turned off when not in use. They checked to see if thermostats and air vents were unblocked, too.

Depending on the number of problems cited in the room, they would secretly hang a red card (for three or more problems), a yellow card (for one to two problems), or a green card (for no problems). When the teachers saw bad results, they tried to improve. Over a period of six weeks, the inhabitants of the school realized their mistakes and fixed them before any more energy was wasted. No one knows exactly where the LEGO team is today, but they're still out there...disguised and saving energy.



THAXTON ELEMENTARY SCHOOL

1081 Monorail Circle
Thaxton, VA 24174
(540) 586-3821

www.bedford.k12.va.us/tes

Project Title: The Sky is the Limit, Recycle!

Project Adviser: Viola Henry

Student Director: McKenzie Tibbs

Thaxton N.E.E.D. Team goals were to teach our students about renewable and nonrenewable energy sources and to increase energy awareness in our community. Many of our projects provided a service, as well as provided conservation ideas that the public could use.

Our projects included saving 1500 acres of rainforest in South America, mixed paper recycling with the City of Bedford Solid Waste Department, recycling ink cartridges and cell phones with Cartridges for Kids, and recycling aluminum cans. Also, we collected and cleaned slightly used coats, then donated them to needy families. Students participated in the Ronald McDonald House pop tab program, where all the money raised provides a home away from home for families of seriously ill people in hospitals in the Roanoke area.

We received a \$4,500 grant from the Chesapeake Bay Restoration Fund Advisory Committee, which included a proposal to establish an arboretum focusing on correct methods of planting and caring for plants in the James River watershed. We also participated in the Virginia Tech/ AECF Energy Fair, the Bedford Christmas Parade, designed grocery bags with conservation tips, and participated in fall and spring clean-up campaigns with the Keep Bedford Beautiful Commission and the 'Earth Day Project' at the Virginia Tech Earth Day Fair.

State SPOTLIGHT

VIRGINIA

Virginia schools enjoyed increased energy education programs this year with support from the Virginia Department of Mines, Minerals and Energy, Dominion, American Electric Power, and the Virginia General Assembly. Workshops on hydrogen, energy resources, the science of energy, and renewable energy were hosted across the state, offering teachers a variety of opportunities to learn about many energy subjects. NEED has a strong relationship with the Virginia Association of Science Teachers and works to provide resources to teachers attending the annual conference. Great trainers, strong sponsors, and committed teachers and students make NEED programs in Virginia successful.

Partnership SPOTLIGHTS

DOMINION

Teachers in North Carolina, Massachusetts, Virginia, Wisconsin and Connecticut are benefiting from an expansion of NEED's partnership with Dominion—providing teacher training, classroom curriculum, and hands-on kits to educators in Dominion communities.

AMERICAN WIND ENERGY ASSOCIATION

In 2007, AWEA, NEED, and KidWind teamed up to create expanded wind energy units for primary, elementary, intermediate, and secondary audiences. Using the exciting KidWind turbine as a foundation, NEED and its wind committee created inquiry based wind and electricity units that help even the youngest students understand wind generated electricity. In 2008, workshops were hosted in partnership with Pacific Gas and Electric and AWEA's Windpower 2008 Conference in Houston, Texas.

NORTHSIDE HIGH SCHOOL

6758 Northside High School Road
Roanoke, VA 24019
(540) 561-8155

Project Title: Earth 911: We Need Your Help
Project Adviser: Marsha Layman
Student Director: Katrlyn Elliott

Our goal was to educate ourselves, our peers, and our community to become aware of our environment and the health of our earth. We titled our project 'Earth 911: We Need Your Help' because we believe it is very important to keep the air clean, the water sanitized, and the overall nature of our surroundings healthy.

We were able to come up with some creative ways to advertise gas efficiency, plastic and paper recycling, energy conservation, and child friendly teaching activities. We first created posters advertising all these things and posted them around Northside Middle and High Schools in areas where traffic was the highest. Then we started off our campaign for recycling by asking families and friends to hold on to their plastics and papers to be collected by our team and recycled at the Roanoke Recycling Center.

For our third project, we taught a class of third grade students at Burlington Elementary in our community. We played games like Match the Resource and *Energy Jeopardy*. The kids drew pictures of their homes and added details depicting ways they could save energy in their homes. For our fourth and final project, we teamed up with our local Member One Federal Credit Union branch and designed a flyer to be handed out in collaboration with their Click to Conserve campaign, encouraging members to pay bills online to conserve resources. In all, this project was very successful; we had positive feedback from everyone we worked with and were able to reach a large number of people!



NEED National SPONSORS AND PARTNERS

American Association of Blacks in Energy

American Electric Power

American Electric Power Foundation

American Petroleum Institute

American Solar Energy Society

American Wind Energy Association

Aramco Services Company

Armstrong Energy Corporation

Association of Desk & Derrick Clubs

All Wild About Kentucky's Environment

Robert L. Bayless, Producer, LLC

BP Foundation

BP

BP Alaska

BP Solar

Bureau of Land Management–
U.S. Department of the Interior

C&E Operators

Cape and Islands Self Reliance

Cape Cod Cooperative Extension

Cape Light Compact–Massachusetts

L.J. and Wilma Carr

Center for the Advancement of Process Technology–
College of the Mainland–TX

Chesapeake Public Schools–VA

Chesterfield County Public Schools–VA

Chevron

Chevron Energy Solutions

City of Melrose–MA

Colorado Energy Science Center

ComEd

ConEd Solutions

ConocoPhillips

CPS Energy

Cypress-Fairbanks Independent School District–TX

Dart Foundation

Desk and Derrick of Roswell, NM

Devon Energy

Dominion

Dominion Foundation

Duke Energy Kentucky

Duke Energy Indiana

Duke Energy North Carolina

Duke Energy South Carolina

East Kentucky Power

EnCana

Energy and Mineral Law Foundation

Energy Information Administration–
U.S. Department of Energy

Energy Training Solutions

Equitable Resources

Escambia County School District–FL

FPL Energy Encounter–FL

First Roswell Company

Florida Department of Environmental Protection

Foundation for Environmental Education

Robert Gorham

Guam Energy Office

Halliburton Foundation

Gerald Harrington, Geologist

Houston Museum of Natural Science

Hydropower Research Foundation

Illinois Clean Energy Community Foundation

Illinois Department of Commerce and Economic
Opportunity

Independent Petroleum Association of America

Independent Petroleum Association of New Mexico

Indiana Office of Energy and Defense Development

Interstate Renewable Energy Council

Iowa Energy Center

Kentucky Clean Fuels Coalition

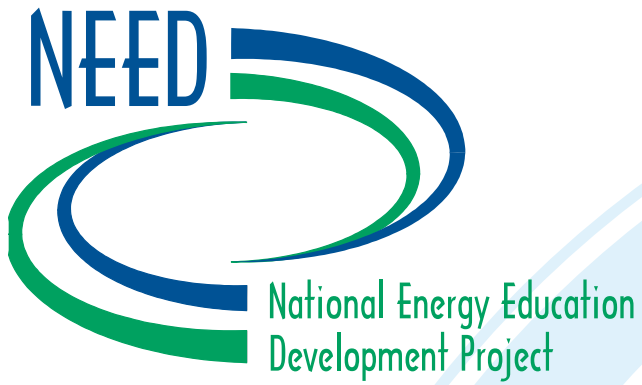
Kentucky Office of Energy Policy

Kentucky Oil and Gas Association

Kentucky Propane Education and Research Council

Kentucky River Properties LLC
Keyspan
KidWind
Llano Land and Exploration
Long Island Power Authority–NY
Maine Energy Education Project
Maine Public Service Company
Marianas Islands Energy Office
Maryland Energy Administration
Massachusetts Division of Energy Resources
Michigan Energy Office
Michigan Oil and Gas Producers Education Foundation
**Minerals Management Service–
U.S. Department of the Interior**
Mississippi Development Authority–Energy Division
Montana Energy Education Council
Narragansett Electric–A National Grid Company
NASA Educator Resource Center–WV
**National Alternative Fuels Training Center–
West Virginia University**
National Association of State Energy Officials
**National Association of State Universities and Land
Grant Colleges**
National Hydropower Association
National Ocean Industries Association
National Renewable Energy Laboratory
New Jersey Department of Environmental Protection
New York Power Authority
**North Carolina Department of Administration–
State Energy Office**
Nebraska Public Power District
New Mexico Oil Corporation
New Mexico Landman’s Association
**New York State Energy Research and Development
Authority**
Offshore Energy Center/Ocean Star/OEC Society
Offshore Technology Conference
Ohio Energy Project

Pacific Gas and Electric Company
Petroleum Equipment Suppliers Association
Poudre School District–CO
Puerto Rico Energy Affairs Administration
Puget Sound Energy
Rhode Island State Energy Office
Roswell Desk and Derrick Club
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Virgin Islands Energy Office
Virginia Department of Mines, Minerals and Energy
Virginia Department of Education
Virginia General Assembly
Wake County Public Schools–NC
Western Kentucky Science Alliance
W. Plack Carr Company
Yates Petroleum



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