Better Buildings Residential Network Peer Exchange Call Series:

Back to School: Engaging Students in Energy Efficiency at Home and in the Classroom

August 17, 2017

Call Slides and Discussion Summary

Agenda and Ground Rules

- Agenda Review and Ground Rules
- Opening Polls
- Residential Network Overview and Upcoming Call Schedule
- Featured Speakers
  - Ed.D **Diane Sumner**, Education Director & **Rodney Shelton**, Senior Director of Business Development, Resource Action Programs
  - **Tresine Logsdon**, Energy and Sustainability Curriculum Coordinator & **Logan Poteat**, Energy Manager, Fayette County Public Schools
  - **Brian Schwenk**, Biology Teacher, and **Laura Potocki**, Head Librarian, Fairfax County Public Schools, VA
- Discussion
- Closing Poll and Announcements

Ground Rules:

1. **Sales of services and commercial messages are not appropriate** during Peer Exchange Calls.
2. Calls are a safe place for discussion; **please do not attribute information to individuals** on the call.

Better Buildings Residential Network

Join the Network

Member Benefits:

- Recognition in media and publications
- Speaking opportunities
- Updates on latest trends
- Voluntary member initiatives
- Solution Center guided tours

Commitment:

- Members only need to provide *one number*: their organization's number of residential energy upgrades per year.

Upcoming calls:

- September 21: Home Improvement Catalyst: Incrementally Providing Energy Efficiency Services to Homeowners
- September 28: Data Overload: Best Practices for Collecting and Using Information
- October 5: Here Comes the Sun: New Advances in Solar and its Connection to Energy Efficiency
- October 12: The Power of IR Diagnostics to Drive Home Upgrades without Incentives

Peer Exchange Call summaries are posted on the Better Buildings website a few weeks after the call

For more information or to join, for no cost, email bbresidentialnetwork@ee.doe.gov, or go to energy.gov/eere/bbrn & click Join

Best Practices: Resource Action Programs

Ed.D **Diane Sumner**, Education Director
Rodney Shelton, Senior Director of Business Development

U.S. DEPARTMENT OF ENERGY

RESOURCEACTION
PROGRAMS

A FRANKLIN ENERGY COMPANY

Presenters

RESOURCEACTION PROGRAMS
A FRANKLIN ENERGY COMPANY

Dr. Diane Sumner
- Director of Education

Rodney Shelton
- Senior Director of Business Development

Resource Action Programs

- Founded in 1993
- Specializing in Energy and Water-Efficiency Education Programs
- Over 300 Programs Implemented Annually
- Over 550,000 Households Served Annually
- 80,000 Sq. Ft. Nevada Program Center

RESOURCEACTION PROGRAMS
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Measure-Based Education®

Measure-Based Education (MBE) is a combination of cost-effective measures blended with interactive, efficiency education. MBE is proven to achieve resource savings, increased customer engagement, and influence multi-generational behavioral change.

RESOURCEACTION PROGRAMS

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Program Methodology

Education for Global Leadership

- Differentiated Instruction
- In-Class, Interactive Education
- Take-Home, Hands-On Activities
- Rich Mix of Materials and Technology
- Seamless Integration

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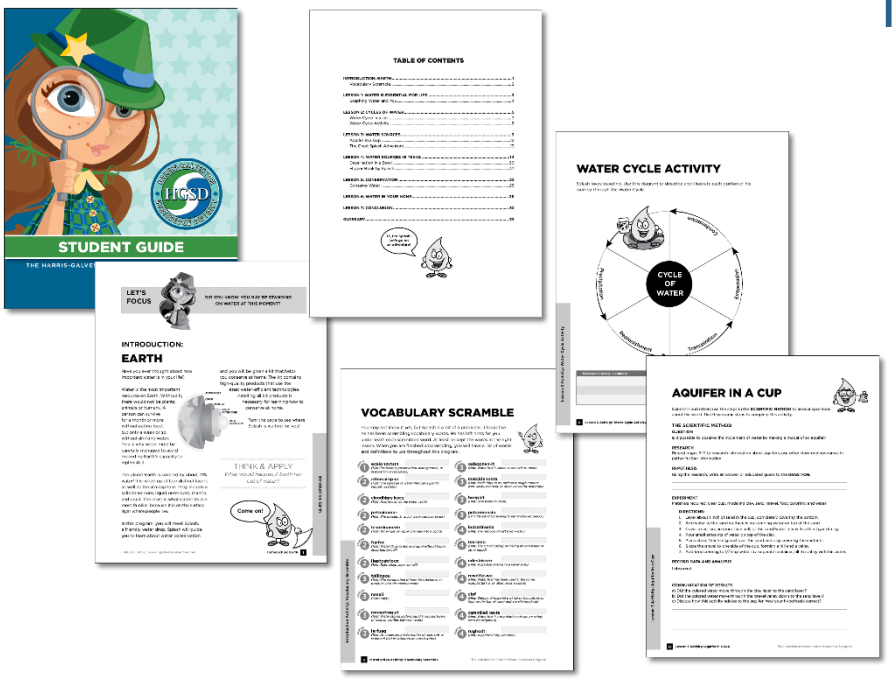
Differentiated Instruction

Visual, Auditory, & Kinesthetic Learning

- Reduces Barriers to Learning
- Offers Multiple Options to Demonstrate Knowledge
- Reaches More Students
- Encourages Parent Participation

In-Class Education



Inter-Disciplinary Literature

- Supports State Academic Standards as well as the Global Expectations of STEM
- Encourages Critical Thinking
- Includes Grade-Appropriate Informational Text

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Take-Home Activities

Hands-On Learning

- Influences Multi-Generational Behavior Change
- Encourages Parental Involvement
- Builds the Bridge Between Classroom and Home Engagement
- Promotes Career & College Preparation

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Materials and Technology

Academic Enrichment Opportunities

- Introduces Energy-Efficiency Mobile Game App
- Incorporates Interactive Websites for Online Educational Resources
- Fosters 21st Century Learners
- Reinforces Classroom Education

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Seamless Integration

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Best Practices: Fayette County Public Schools

Tresine Logsdon, Energy and Sustainability Curriculum Coordinator
Logan Poteat, Energy Manager

U.S. DEPARTMENT OF ENERGY

EMPOWERING STUDENTS THROUGH DATA

Following Their Lead

It's about Sustainability.
SUSTAINABILITY.FCPS.NET

www.Sustainability.fcps.net

Tresine Logsdon
Logan Poteat

Fayette County Public Schools
Lexington, KY

VISION

Fayette County Public Schools will be a **global leader** in the three pillars of sustainability: environmental literacy, energy efficiency and student wellness.

MISSION

To **empower students** to create change through enduring improved sustainability by equipping school and community stakeholders with the tools, knowledge and resources **to preserve our natural, human and fiscal resources.**

It's about Sustainability.
SUSTAINABILITY.FCPS.NET

OUR APPROACH

- Embrace a **student-driven** model
- Create **mindful engagement** of diverse stakeholders and ideas
- Utilize **data-driven monitoring** to inform decisions
- Provide purposeful, continuous, comprehensive **support to students and teachers**

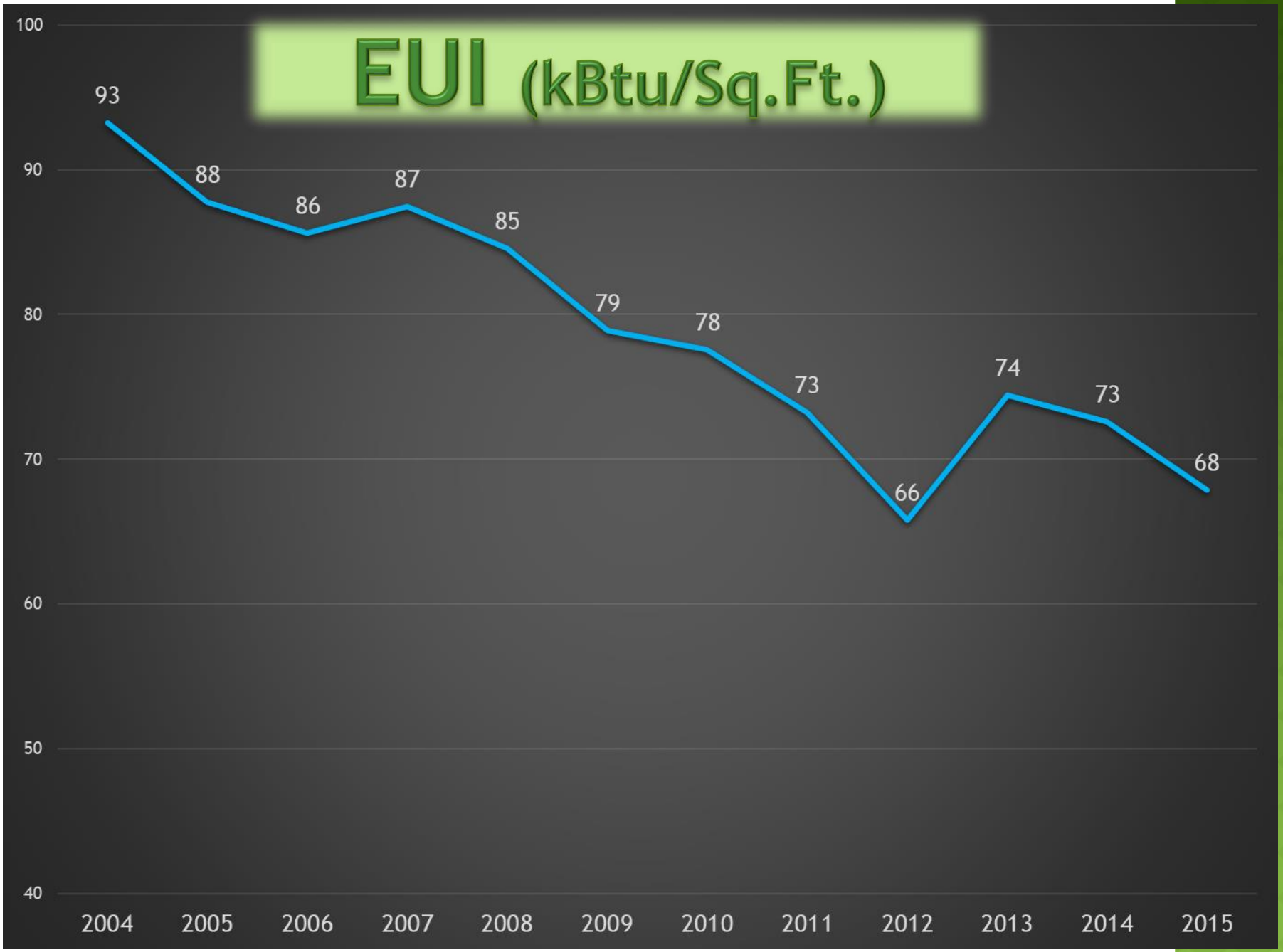
CORE VALUES

Integrity

Passion

Collaboration

Innovation


EUI (kBtu/Sq.Ft.)
100
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40
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88
86
87
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73
68
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015

STEM vs. STEAM

Bridging the Brain Divide

What is 21st Century Learning?

Teaching philosophy that focuses on preparing students for today's world and the careers of 21st century by engaging them in projects and activities that develop critical thinking, creativity, collaboration, communication and citizenship.

What is STEAM?

Curriculum umbrella that integrates Science, Technology, Engineering, Arts and Math, designed to meet the needs of the 21st Century Learner.

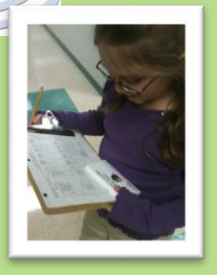
E=USE²

Education Leads to Understanding Sustainability, Energy & the Environment

Student-driven, standards-aligned 6-step program

Step 1: Form an E=USE² Team

livegreenlexington PARTNER



Step 2: Investigations (Secret Energy Audit, Plug Load Survey, Light Level Survey, KGHS Energy Inventory)

Step 3: Awareness & Education (Light switch/exterior door stickers, posters, Power Patrol badges, patrol Post-Its)

Step 4: STEAM and Our Environment: Design/Implement Sustainability School Improvement Project; Dashboard Training

Step 5: Sustainability Scorecard

Step 6: Recognition & Reward

KENTUCKY GREEN AND HEALTHY SCHOOLS

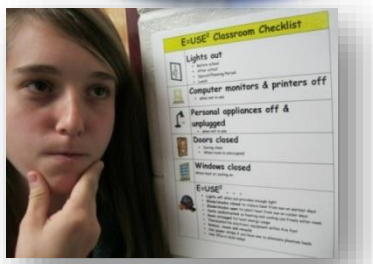
STEM

Step 2: Investigation

- ✔ **Plug Load Study**
- ✔ **Light Level Survey**
- ✔ **Secret Audit**
- ✔ **KGHS Energy Inventory**

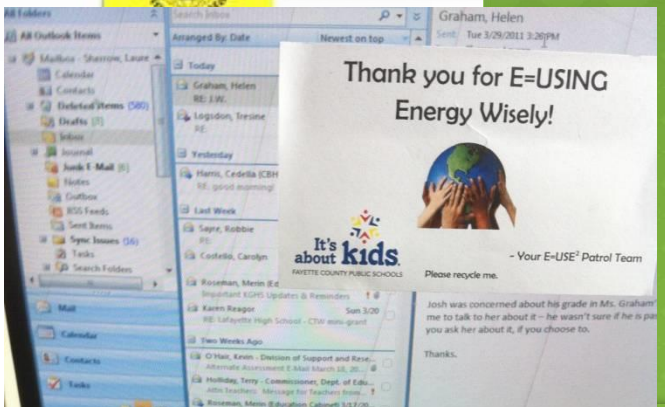
- ❑ Energy Transformations/Energy flow through the Earth
- ❑ Renewable vs non-renewable energy sources
- ❑ Fossil fuel formation and application
- ❑ Photosynthesis/cellular respiration
- ❑ Sustainability defined (environmental, physical, economic factors)
- ❑ Energy conservation/energy solutions
- ❑ Global climate/weather patterns and energy transfer
- ❑ Anthropogenic environmental impacts
- ❑ Population dynamics
- ❑ Data and graph analysis
- ❑ Human Wellness
- ❑ Fission vs fusion, nuclear decay

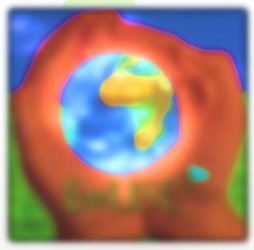
Step 3: Awareness



- Data Graphing & Analysis
- Post Its/Stickers
- Student Team Lanyard/Badge
- Poster

Secret Audit→ Line Graph
Plug Load→ Pie Graph
Light Level→ Bar Graph





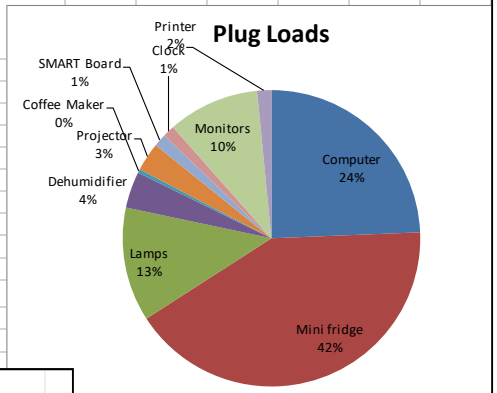
Plug-Load Worksheet

Enter your numbers in the green cells

1000 watts = 1 kWh (kilowatt hour)

Average Electricity Costs: $0.09 per kWh

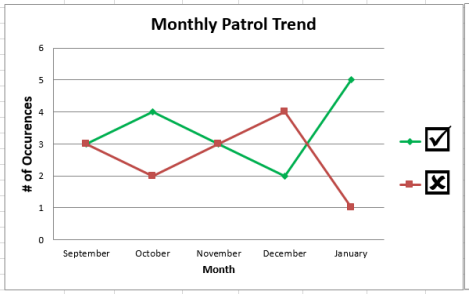
Type of Equipment	Quantity in Use	Typical Use, hours per day	Typical Days Per Month	Average Running Wattage	Total running hours per month	Monthly kWh	Months per year used	Yearly kWh	Annual Cost Per item	Total Annual Cost
Computer	8	12	20	110	240	26.4	10	264	$23.76	$190.08
Mini fridge	1	24	30	500	720	360	10	3600	$324.00	$324.00
Lamps	20	6	20	45	120	5.4	10	54	$4.86	$97.20
Dehumidifier	1	8	20	215	160	34.4	10	344	$30.96	$30.96
Coffee Maker	1	1	20	175	20	3.5	10	35	$3.15	$3.15
Projector	1	6	20	225	120	27	10	270	$24.30	$24.30
SMART Board	1	8	20	75	160	12	10	120	$10.80	$10.80
Clock	1	24	31	15	744	11.16	10	111.6	$10.04	$10.04
Monitors	8	12	20	45	240	10.8	10	108	$9.72	$77.76
Printer	1	24	31	18	744	13.392	10	133.92	$12.05	$12.05
								Total Costs:		$780.35

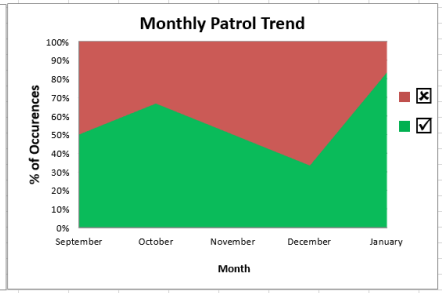


Monthly Patrol Records

Enter the total number of checks and the total number of X's for each month into the green cells.

		Month 1 September	Month 2 October	Month 3 November	Month 4 December	Month 5 January
Energy Conserved	☑	3	4	3	2	5
Energy Wasted	☒	3	2	3	4	1



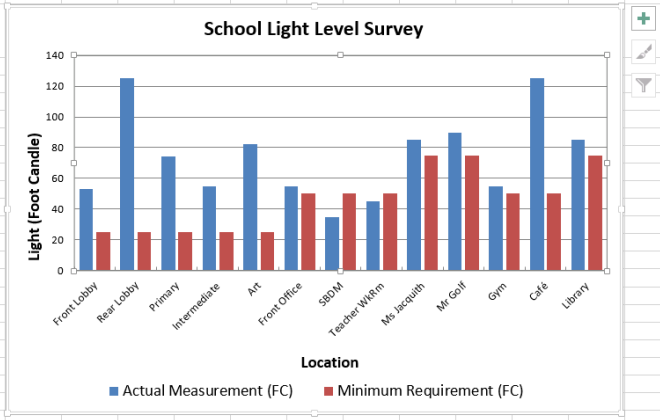


Light Levels | Monthly Patrol | Plug Loads

School Light Level Survey

	Location Description	Actual Measurement (FC)	Minimum Requirement (FC)
Foyer Area 1	Front Lobby	53	25
Foyer Area 2	Rear Lobby	125	25
Corridor/Hallway 1	Primary	74	25
Corridor/Hallway 2	Intermediate	55	25
Corridor/Hallway 3	Art	82	25
Office Space 1	Front Office	55	50
Office Space 2	SBDM	35	50
Teacher Workroom 1	Teacher WkRm	45	50
Classroom 1	Ms Jacquith	85	75
Classroom 2	Mr Golf	90	75
Gym (50 ES, 75 MS HS)	Gym	55	50
Cafeteria	Café	125	50
Library	Library	85	75

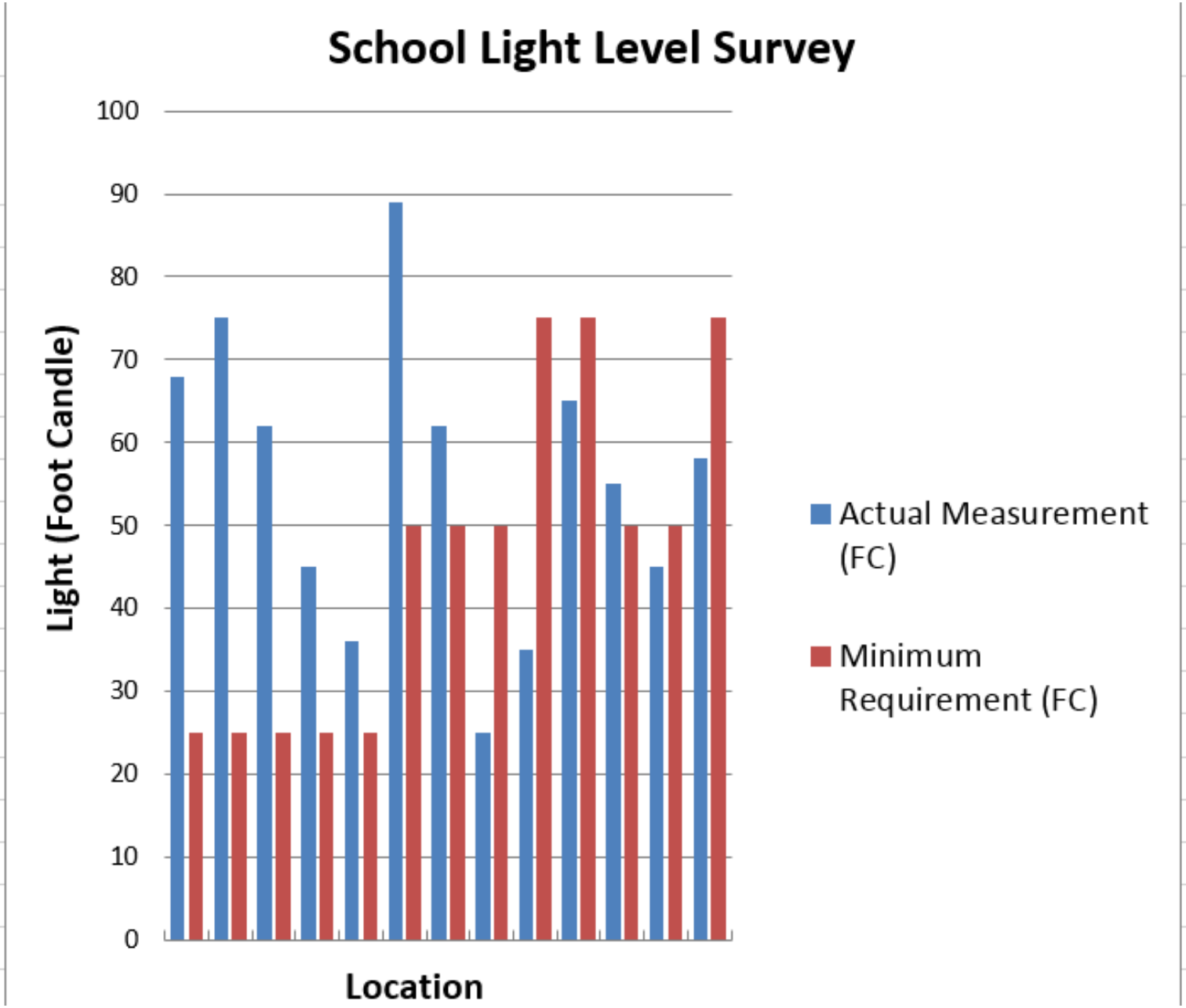
Put your own data in the green cells



School Light Level Survey

	Location Description	Actual Measurement (FC)	Minimum Requirement (FC)
Foyer Area 1		68	25
Foyer Area 2		75	25
Corridor/Hallway 1		62	25
Corridor/Hallway 2		45	25
Corridor/Hallway 3		36	25
Office Space 1		89	50
Office Space 2		62	50
Teacher Workroom 1		25	50
Classroom 1		35	75
Classroom 2		65	75
Gym (50 ES, 75 MS HS)		55	50
Cafeteria		45	50
Library		58	75

Put your own data in the green cells


School Light Level Survey
100
90
80
70
60
50
40
30
20
10
0
Light (Foot Candle)
Location
Actual Measurement (FC)
Minimum Requirement (FC)

E=USE^2 Patrol Record

*To be submitted to Energy Manager by April 11th.

Patrol date								Totals	
Classroom:	**Time**	**Lights**	**Computer monitors & printers**	**Personal Appliances**	**HVAC Units**	**Doors Closed**	**Windows Closed**	**✓**	**X**
Non-classroom	**Time**	**Lights**	**Computer monitors & printers**	**Personal Appliances**	**HVAC Units**	**Doors Closed**	**Windows Closed**	**✓**	**X**

Time Codes:

BS= Before School

LR= Lunch/Recess

AS= After School

Record Key

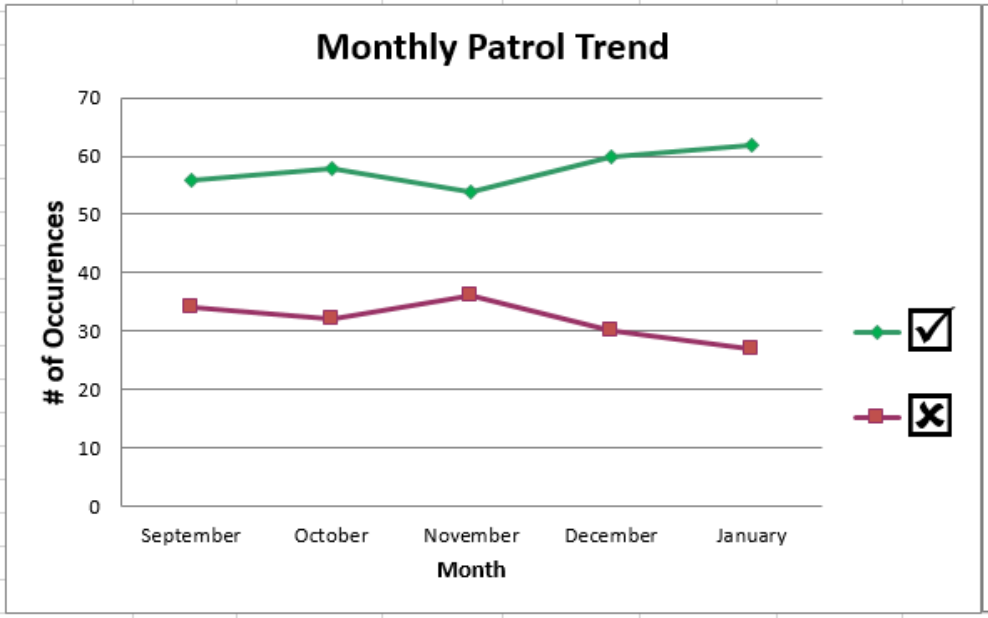
✓ = Energy conserved / Energy in use, people present

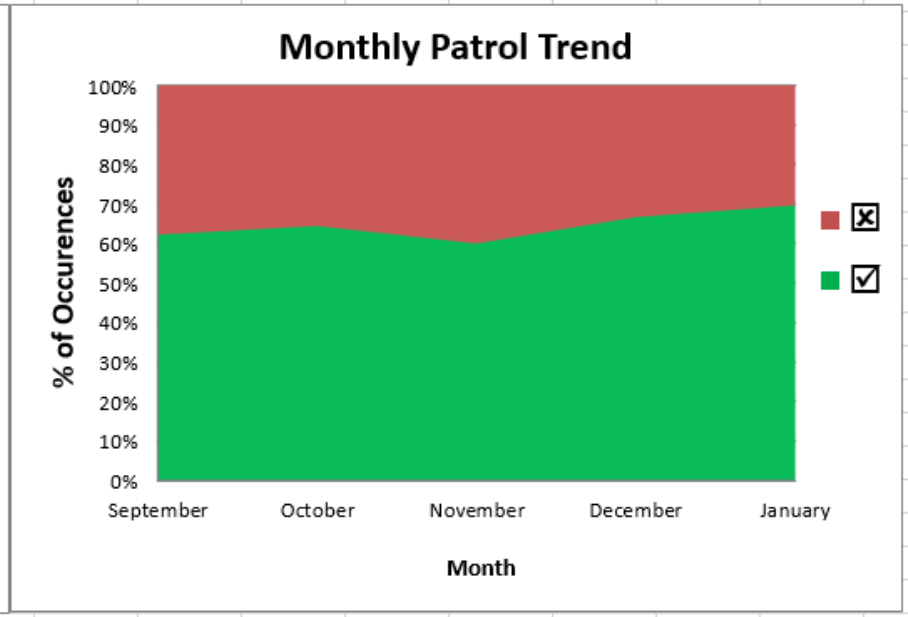
X = Energy in use, no people

Monthly Patrol Records

Enter the total number of checks and the total number of X's for each month into the green cells.

		Month 1 September	Month 2 October	Month 3 November	Month 4 December	Month 5 January
Energy Conserved	☑	56	58	54	60	62
Energy Wasted	☒	34	32	36	30	27





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Computer	8	12	20	110	240	26.4	10	264	$23.76	$190.08
Mini fridge	1	24	30	200	720	144	10	1440	$129.60	$129.60
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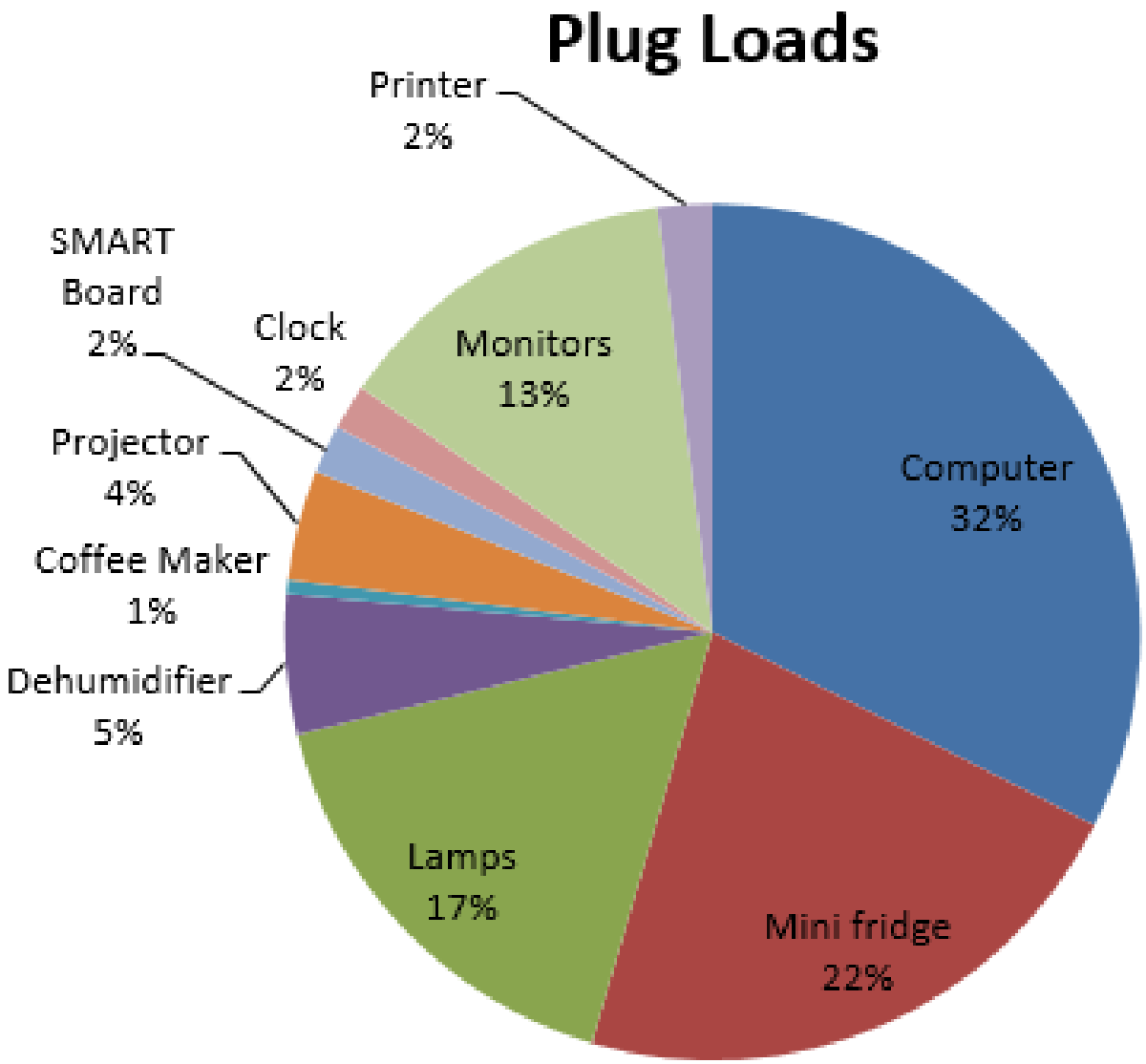
Clock	1	24	31	15	744	11.16	10	111.6	$10.04	$10.04
Monitors	8	12	20	45	240	10.8	10	108	$9.72	$77.76
Printer	1	24	31	18	744	13.392	10	133.92	$12.05	$12.05
									Total Costs:	$585.95


Plug Loads
Printer
2%
SMART
Board
2%
Clock
2%
Monitors
13%
Projector
4%
Coffee Maker
1%
Dehumidifier
5%
Computer
32%
Lamps
17%
Mini fridge
22%

Impact of Savings

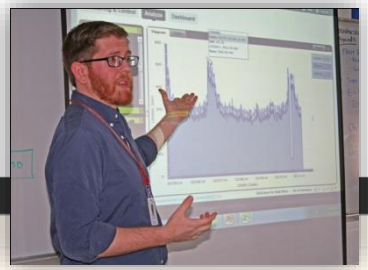
- What sort of savings can we expect in the short term (5%) and long term (20%)?

	Carbon Dioxide (CO_2), Tons/yr	Coal Burned, Tons/yr
Single Elementary 5% Reduction	36	113
Total Elementary 5% Reduction	1,291	4,058
Single Middle School 5% Reduction	57	181
Total MS 5% Reduction	631	1,987
Single High School 5% Reduction	163	511
Total HS 5% Reduction	813	2,557
TOTAL 5% Reduction	**2,735**	**8,602**

$400,000 per year

20% $1.6 million/year

Advantage Navigator

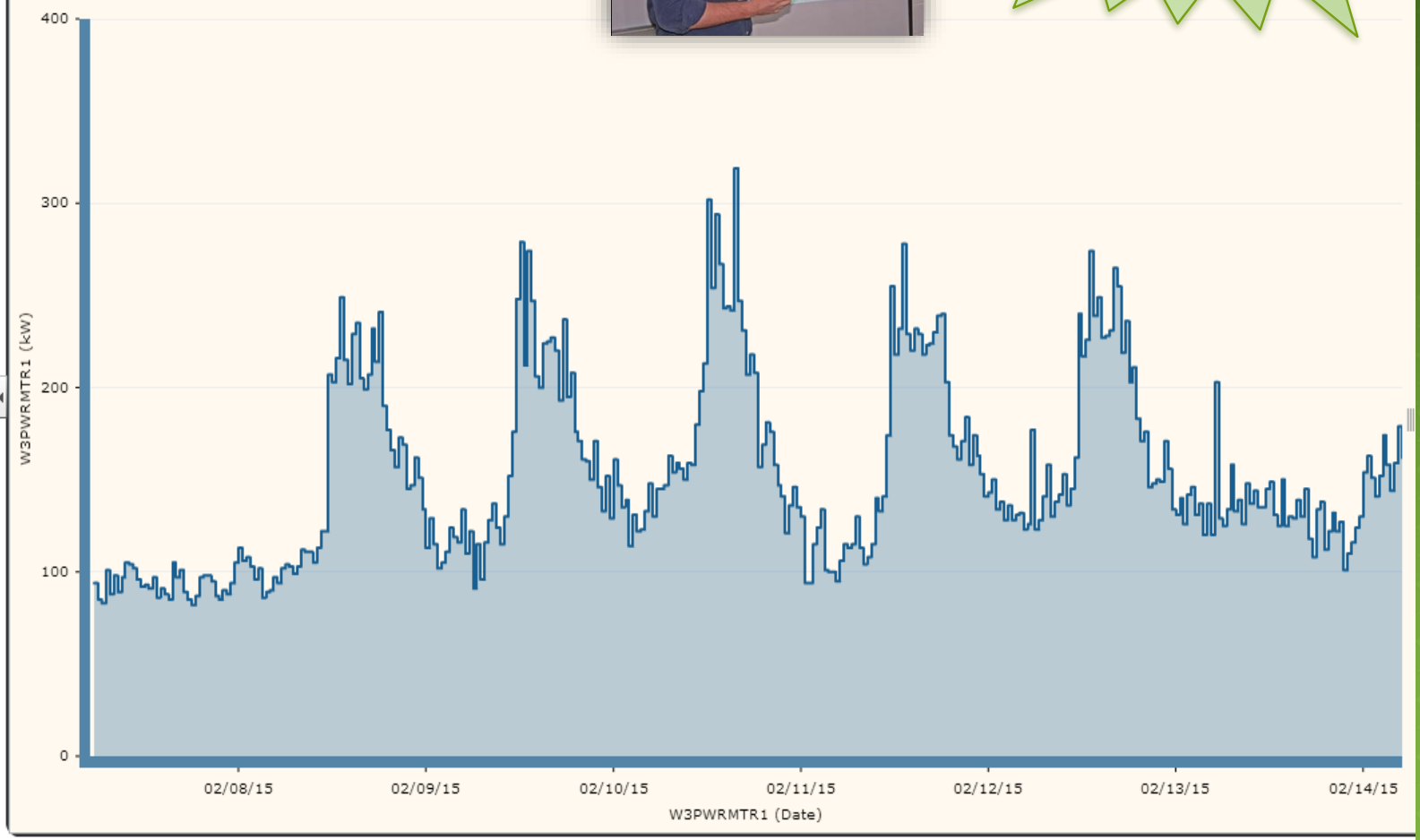


Students measuring, analyzing and managing

Monitoring & Control | Analyze

Tree
Standard
SOUTHERN MID...
SOUTHSIDE TEC...
SQUIRES
TATES CREEK (E...
TATES CREEK (H...
TATES CREEK MI...
TLC (MARTIN LU...
VETERANS
WELLINGTON
ELECTRIC
W3PWRM...
W3PWRM...
Weather Data
Views
Save View
No views have been saved
Preselection
Relative Period
Start Date 02/08/15
End Date 02/15/15
Resolution every 15 mi
Chart Type Stepped Are

Diagram | Table



Click Here for Help Menu | Nr. of windows

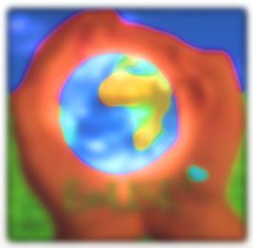
Green Building Dashboard

- Customized online public portal to display sustainability information including live data, historical consumption, energy simulations, energy calculator, carbon equivalents, social media connections, cross-town competitions
- Students will update to feature and promote school sustainability goals, achievements and initiatives

Dashboa

The dashboard has been AWESOME in sharing information with the teachers. I was able to tell them where we ranked in the competition and include a link as well. I have teachers emailing me now because they want to share what they are doing, like unplugging unused lamps and turning off the laptop charging carts when they are not in use. Great stuff!! Julie Jones

Step 4: STEAM and Our Environment



Go Green. Earn Green!

Save 5% or more on your school's monthly energy consumption and earn part of the savings.

How will you use your Green?

- -Sustainability projects?
- -Classroom supplies?
- -PTA projects?
- -Use your imagination!

It's up to you.

Russell Cave	-42.33%	$242.78
Sandersville	-14.68%	$120.30
Southern	-23.19%	$237.74
Squires	-12.04%	$109.89
Stonewall	-16.72%	$156.71
Tates Creek	-9.33%	$101.07
Veterans Park	-35.38%	$443.81

SAMPLE AWARD

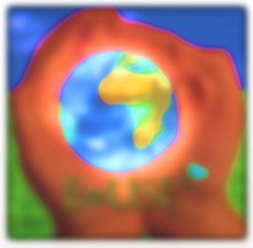
It's about Sustainability.

Go Green + Earn Green Details and Fine Print

Schools saving 5% or more in a monthly billing cycle, compared to themselves one year ago, will earn 10% of those savings. Additionally, ten of the most efficient schools each month (five elementary, three middle, one high school, & one special school) will earn $100 each. Award checks will be given out twice this year; in December for September, October, and November, and in May for December, January, February and March. Elementary schools will be able to earn a maximum of $1500 total per year, middle and special schools $2000, and high schools $2500. Awards will be given for each month until the funds have been depleted or your school reaches its maximum. Each monthly award is independent of how much is or isn't saved in other months. Data is based on monthly bills for both gas and electric, and therefore will have around a six week wait time to determine savings. The Sustainability Team will make every attempt to ensure that the data is accurate, and will have final discretion on all amounts awarded. The awards may be spent on anything that widely benefits the school, students, or staff with the final decision to be made by the school's E=USE² teacher lead and principal. Contact Energy & Sustainability Curriculum Coordinator (Tresine.Logsdon@fayette.kyschools.us) with any other questions.

Step 5: Sustainability Scorecard

- Modeled after US Dept of Education 3 pillars of sustainability
- Quantitative and qualitative metrics tool
- Fall 2017 Board Recognition
- National Green Ribbon School



Sustainability Scorecard

Environmental Literacy

- $E=USE^2$
- Farm to School
- KY Green & Healthy Schools
- Outdoor Classrooms
- KY National Energy Education Development Project
- Adopt-A-Tree

Student Wellness

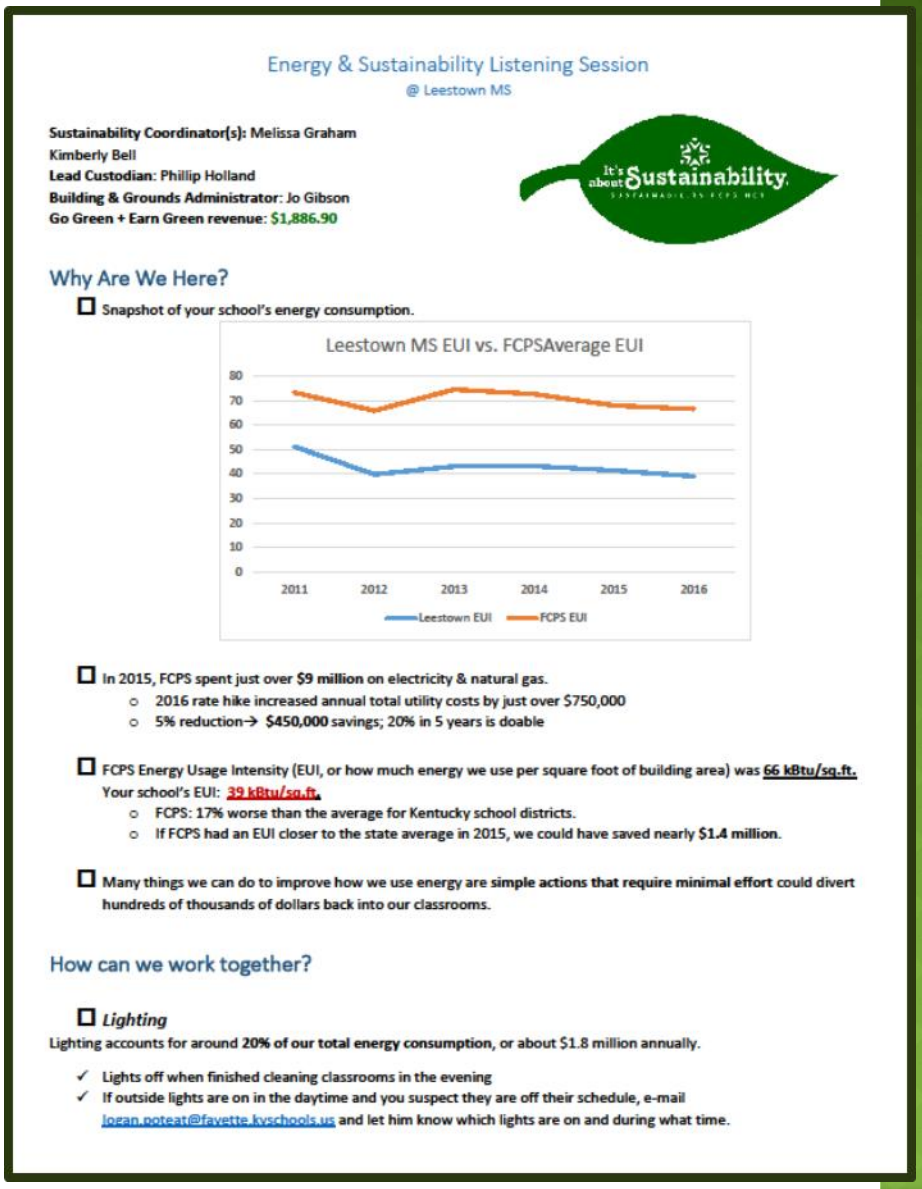
- Student Wellness Policy
- Recess Policy
- Healthy Snack Policy
- School Garden

Energy Efficiency/Building Performance

- Shutdown Checklists
- Energy Star
- Go Green + Earn Green
- Green Ribbon School
- Electronic Recycling
- No Idling

Energy & Sustainability Listening Sessions

- Customized energy data
- HVAC set temp revisions
- Computer shutdown revisions
- Break shutdowns
- Recycling savings
- GG + EG, student-driven projects



Energy & Sustainability Listening Session

@ Leestown MS

Sustainability Coordinator(s): Melissa Graham
Kimberly Bell
Lead Custodian: Phillip Holland
Building & Grounds Administrator: Jo Gibson
Go Green + Earn Green revenue: $1,886.90

It's about Sustainability.

Why Are We Here?

- ☐ Snapshot of your school's energy consumption.

- ☐ In 2015, FCPS spent just over **$9 million** on electricity & natural gas.
  - 2016 rate hike increased annual total utility costs by just over $750,000
  - 5% reduction→ **$450,000** savings; 20% in 5 years is doable
- ☐ FCPS Energy Usage Intensity (EUI, or how much energy we use per square foot of building area) was **66 kBtu/sq.ft.**
  Your school's EUI: **39 kBtu/sq.ft.**
  - FCPS: 17% worse than the average for Kentucky school districts.
  - If FCPS had an EUI closer to the state average in 2015, we could have saved nearly **$1.4 million**.
- ☐ Many things we can do to improve how we use energy are **simple actions that require minimal effort** could divert hundreds of thousands of dollars back into our classrooms.

How can we work together?

- ☐ ***Lighting***

Lighting accounts for around **20% of our total energy consumption**, or about $1.8 million annually.

- ✓ Lights off when finished cleaning classrooms in the evening
- ✓ If outside lights are on in the daytime and you suspect they are off their schedule, e-mail logan.poteat@fayette.kyschools.us and let him know which lights are on and during what time.

National Alignments

NEXT GENERATION SCIENCE STANDARDS
For States, By States

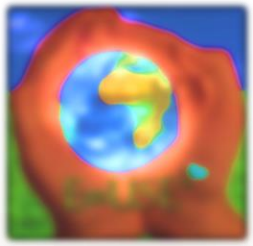
U.S. DEPARTMENT OF EDUCATION
GreenRibbonSchools

Green Schools National Network

naaee
North American Association for Environmental Education

Kentucky Environmental Literacy Plan

ENERGY STAR



GREEN APPLE DAY OF SERVICE
THE CENTER FOR GREEN SCHOOLS

In Your Classroom, School or District

- Renovation & Design 101 Teams
- Green Career Maker Fair
- No Idling
- Farm To School
- KY American Water Excellence in Water Education
- Aquaponics
- Styrofoam in Cafeterias
- Cafeteria Composting
- School Garden Coalition
- Urban Tree Canopy

BLUEGRASS YOUTH SUSTAINABILITY COUNCIL

Students from six public and three private area high schools, 8 project committees

- Energy Audit
- Legislative
- Green Cafeteria
- Bluegrass Idea Festival
- Urban Forest Initiative
- UK SSC Drop-A-Cap
- Vintage Vinyl LP Recycling
- Solar Umbrella

Bluegrass Idea Festival
Earth Day 2017

Best Practices: Fairfax County Public Schools, VA

Brian Schwenk, Biology Teacher

Laura Potocki, Head Librarian

U.S. DEPARTMENT OF ENERGY

Zombie Apocalypse Survival Guide Project

Brian Schwenk and Laura Potocki

Learning Environment Overview

- School: Falls Church High School
  - Fairfax County Public Schools in Northern VA
- Class: Geosystems (Earth Science with integration of technology)
  - 11th and 12th Graders, many English Learners and former English Learners
  - 14 students in this section
  - 90 minute block every other day
  - Full year class with End-of-Year Assessment (Standards of Learning Assessment)
  - Project ran during December 2016

Image source: flickr.com

Surviving The Zombie Apocalypse

You wake up one morning and it's finally happened:

Image source: clipartkid.com

The Zombie Apocalypse has started in New York.

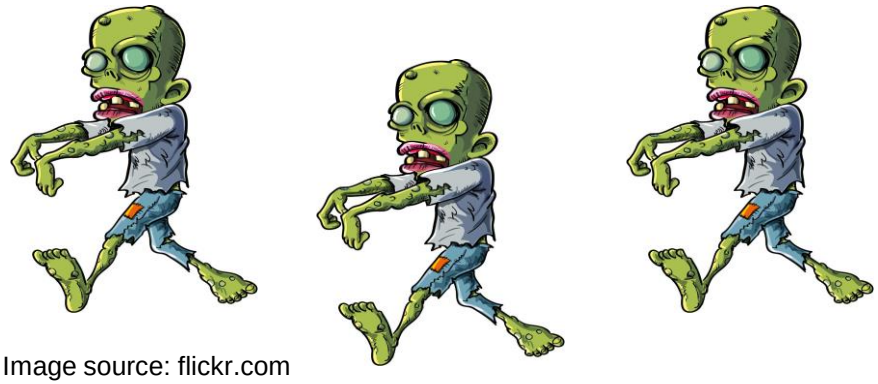


Image source: flickr.com

Image source: 123RF.com

Power plant workers have been eaten.

Cell phone towers are down.

It’s only a matter of time before the zombies get to Virginia.

Image source: clker.com

People have plundered all of the gas, groceries, and restaurants in the area.

Image source: worldartsme.com

Image source: keywordsuggest.org

Image source: clipartkid.com

Image source: jolanamalkston.com

All of your usual sources of energy are gone. There is no TV, sour milk in the refrigerator, no lights, no heat.

What will you do?

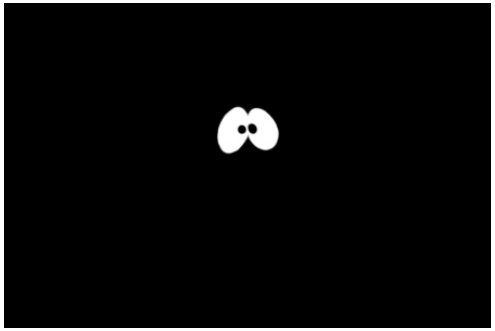


Image source:
worldartsme.com

Devise a survival plan for you and your family until the zombies are contained.

Image source: clker.com

Your plan should include:

- 4-5 renewable energy projects
  - (at least 3 different types of resources)
- 2 nonrenewable energy projects

Explain your resource, what kind it is, how it is created, think about advantages, disadvantages, how much that energy source is currently used

- Survival supplies (tools, materials, resources)
- Food & water
- Anything you can’t live without

Image source: scoutlander.com

- Weapons aren’t necessary, just think about everyday survival needs.

Image source: vecteezy.com



They’re coming...






Project Goals

- Students will be able to identify and explain renewable and nonrenewable energy resources, including differences, advantages, and disadvantages of each type of resource.

- Hands-On, Collaborative Learning
  - Used a Guided Inquiry Design (GID) Lesson Model
  - Created renewable energy resource products and a survival plan poster

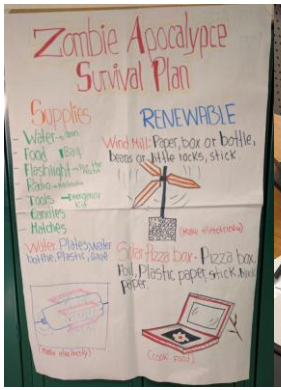
- Essential Question: How can I survive without my usual sources of energy?

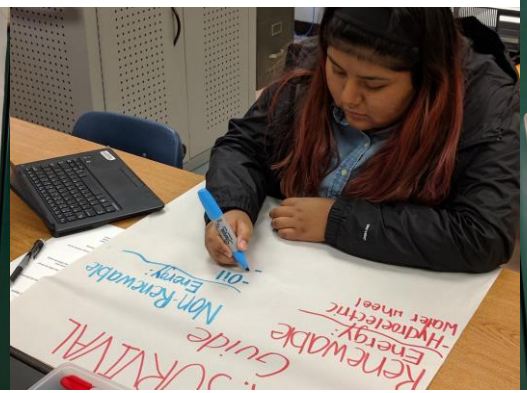
Renewable Energy Resource Projects

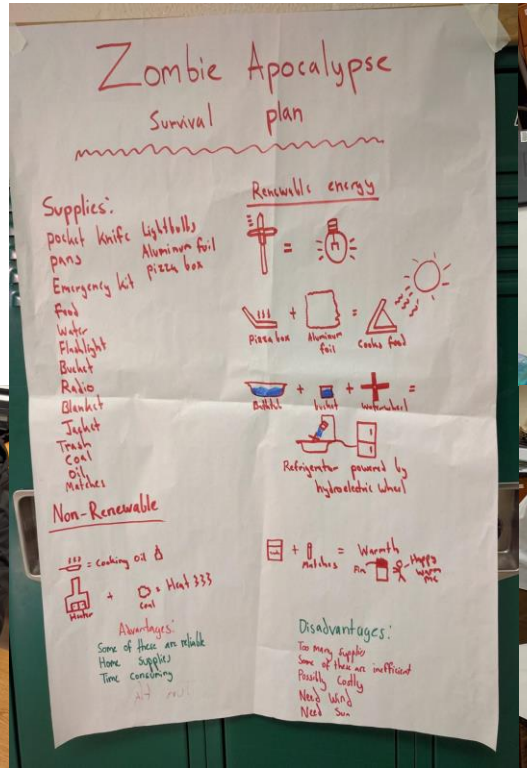
- Students were given a choice to complete one of three projects in groups of 3-4:
  - Solar Heater
  - Water Wheel
  - Windmill

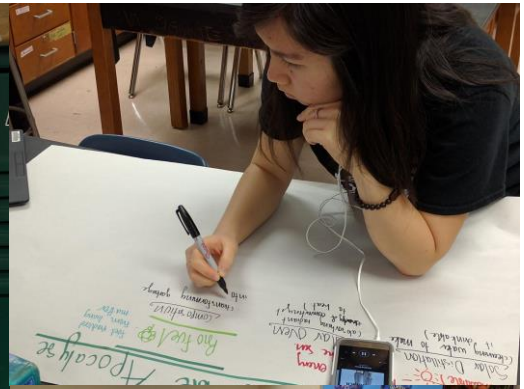
Survival Guide Posters

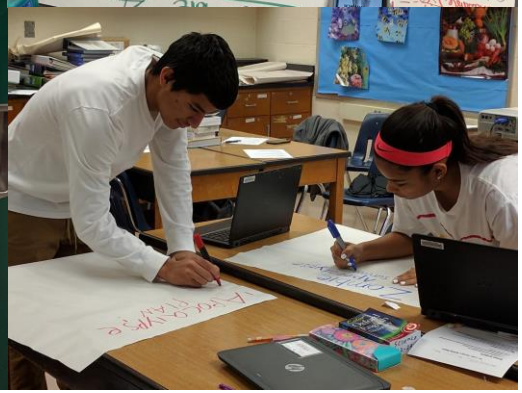
- Energy resources and supplies to sustain your family until the zombies are contained.











Student Reflection

- Online resources provided students with project ideas
- Visuals helped students understand what type of product they were creating
- Students wished they had done more research
  - “I would research more information about all renewable and nonrenewable resources and learn how to build not only the project I helped to build but also learn how to build the others to be able to get more energy and know how maintain the energy without using too much resources.”
  - “If I were to redo this project I would have dug deeper into the website or explored into other ones that contained different projects. If I were granted more time I would’ve also liked to actually performed the projects to see how effective they were and how durable each one was.”

Teacher Reflection

- Successes:
  - Hands-on learning (no lecture)
    - Student interest drove the research and product design
    - High engagement
  - Student collaboration
  - Understanding the content
  - Gallery Walk with student reflection
  - Limited cost

Teacher Reflection

- Areas for Improvement:
  - Connect to home/real-life energy usage
  - Pre- and post-data regarding energy resource awareness
  - More time
    - Explore other renewable energy resource projects or improve upon chosen structure
    - Develop a more complete Zombie Apocalypse Survival Plan
  - Reflect on impact of the project toward end of the school year

Impact on Citizenship

- Emphasized that individuals can have an impact on the environment using simple, everyday objects, and that renewable energy resources are more feasible and accessible than they may have originally thought

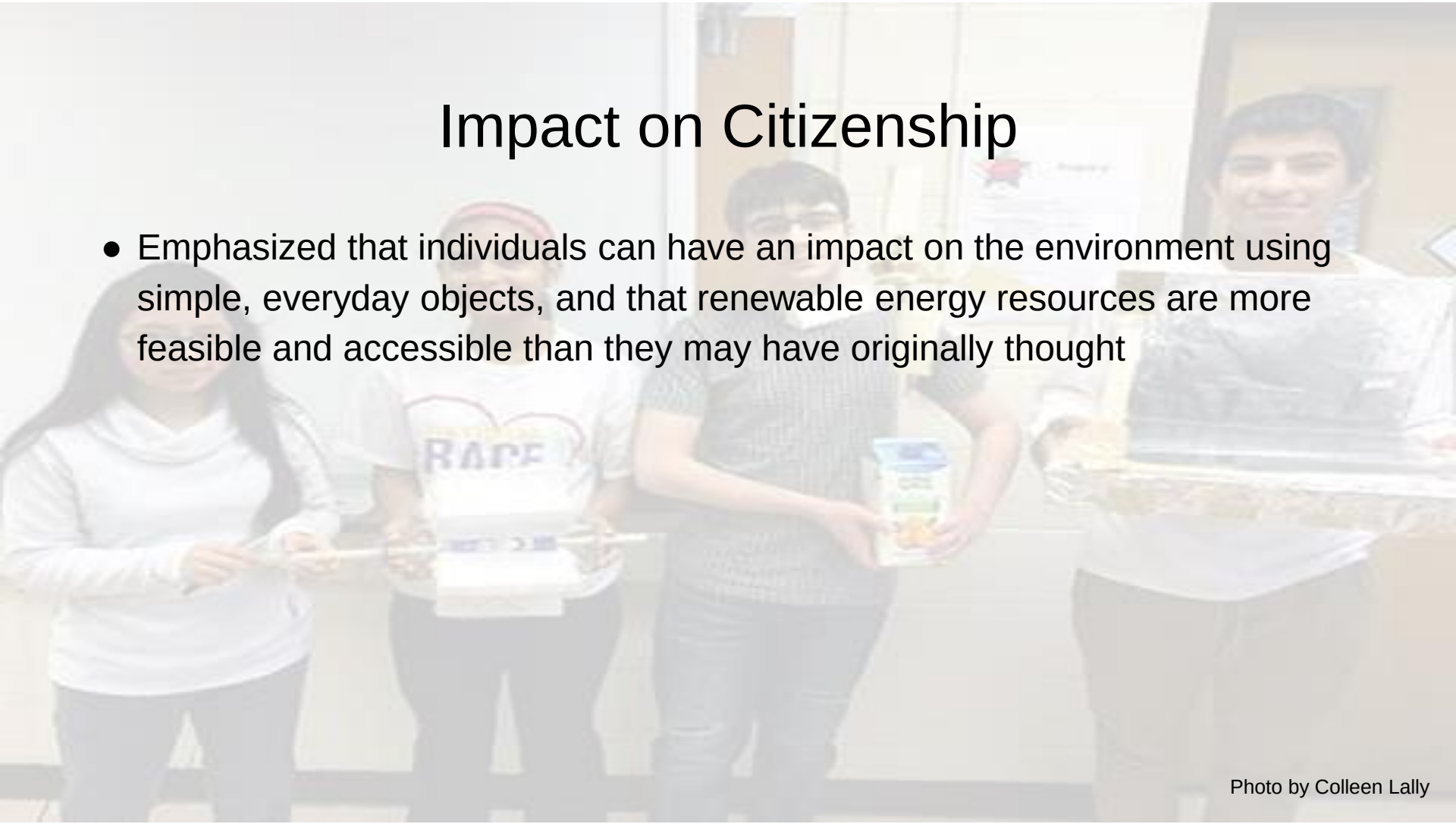


Photo by Colleen Lally

Discussion Highlights (1 of 3)

Make it fun and educational:

- Putting tools in students' hands and asking them to investigate energy efficiency in their own school allows students to collect and analyze their own data. This is highly empowering for students.
- La Fayette's initiative was centered around eliminating inefficiencies in energy use and changing behaviors. Students used plug load surveys to measure the energy use of appliances in their classroom, but also badges and "thank you/oops" post-it notes to encourage more energy efficient behaviors (e.g. turning off lights when the classroom is unoccupied).
- Fairfax's survival kits created by students were shown in a "gallery walk" where students could see each other's projects, and provide feedback. This increased the overall awareness around energy efficiency in the school.

Discussion Highlights (2 of 3)

Engage the teachers, engage the students:

- Research Action's program for 5th grade students developed in collaboration with the Con Edison utility provides teachers with the necessary materials to teach energy efficiency in the classroom.
- Fairfax and La Fayette's programs were led by teachers who guided students in their energy efficiency projects.

Built-in, not add-on:

- La Fayette and Fairfax built their energy efficiency initiatives as part of the existing curriculum (e.g. of the renewable energy unit), to trigger more participation and engagement from students.

Discussion Highlights (3 of 3)

Students are the ones that are spearheading the "seat belt movement", the "non-smoking movement" and now the “energy efficiency movement".

- Student education doesn’t stop in the classroom: energy use is also a family affair. Going home, students will bring at the family table discussions around what they learned at school, e.g. on tips to save energy or choose the most energy efficient appliances.
- La Fayette incorporates tips for energy conservation at home in their newsletter, which students can then share with their parents.
- Resource Action uses interactive materials like online games with particular rewards that students and their families can win when solving various energy efficiency challenges.

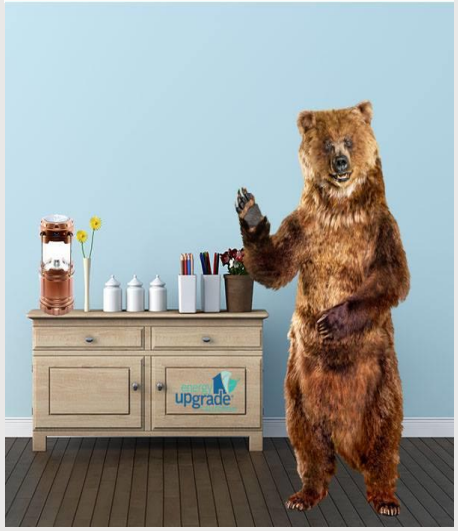
Upcoming Seasonal Messaging Opportunities

Now is the time to start planning energy efficiency messaging!

AUGUST

November 5

End of Daylight Saving Time

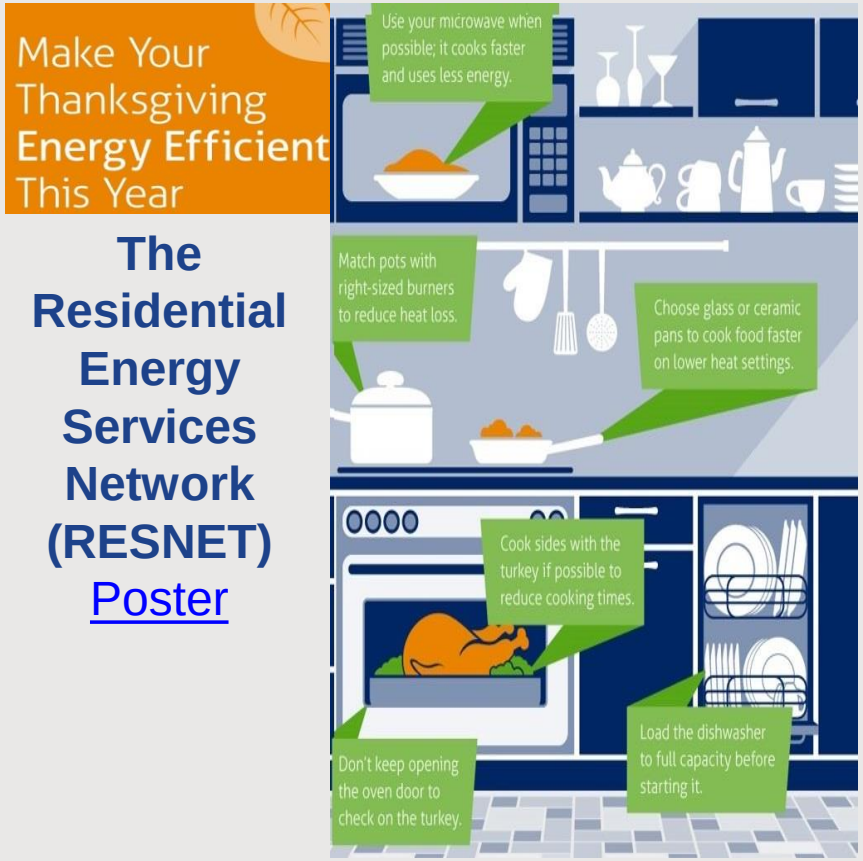


November 23

Thanksgiving

Energy Upgrade California

Facebook Post: With #DaylightSavingTime ending tomorrow, Bear is gearing up for darker days by using off-grid #energy sources like solar lights to save money!



The Residential Energy Services Network (RESNET)

Poster

Addenda: Attendee Information and Poll Results

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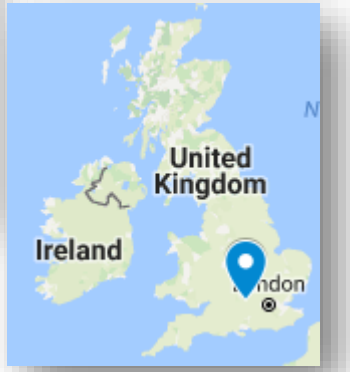
Call Registrant Locations



Call Attendees: Network Members

- Boulder County
- Center for Sustainable Energy
- City of Columbia MO
- City of Fort Collins
- City of Kansas City
- Local Energy Alliance Program (LEAP)
- FM Facility Management Consultores
- The Insulation Man, LLC
- WattzOn

Call Attendees: Non-Members (1 of 2)

- Appalachian Voices
- Architecture
- Ballarat Consulting
- Brevard Public Schools
- Celadon Solutions, LLC
- Consortium for Energy Efficiency (CEE)
- DDC Public affairs
- Department of Public Works Facility, Manchester, New Hampshire
- Dimension energetique
- Educational Service District 112
- emPower Central Coast Program
- Enbridge Gas Distribution Inc.
- Energize NY
- Energy Federation, Inc.
- Fayette County Public Schools
- Holland Board of Public Works
- Hydro-Québec Research Institute (Ireq)
- IBACOS, Inc.
- ICF
- Lake Apopka Natural Gas District

Call Attendees: Non-Members (2 of 2)

- Local Government Commission
- Lockheed Martin
- Los Angeles Unified School District
- Mercy Housing Management Group
- NANA Regional Corporation
- New Jersey Natural Gas
- Proctor Engineering
- River Trails School District 26
- Riverside Public Utiliities
- Seattle City Light
- Sierra Business Council
- Skidmore, Owings & Merrill (SOM)
- Smaart House
- Smith & Boucher Engineers
- The Energy Coalition
- The University of Kansas
- Transition Wayland
- U.S. Green Building Council
- Utah Governor's Office of Energy Development
- Verdis Group
- Volunteers of America
- Wisconsin K-12 Energy Education Program (KEEP)

Opening Poll #1

- Which of the following best describes your organization's experience in engaging students in energy efficiency?
  - Some experience/familiarity – ***46%***
  - Limited experience/familiarity – ***23%***
  - No experience/familiarity – ***18%***
  - Very experienced/familiar – ***8%***
  - Not applicable – ***5%***

Closing Poll

- After today's call, what will you do?
  - Seek out additional information on one or more of the ideas – ***62%***
  - Consider implementing one or more of the ideas discussed – ***28%***
  - Make no changes to your current approach – ***12%***
  - Other (please explain) – ***0%***