



**THINK!
ENERGY**

with



power[®]

PPL ELECTRIC UTILITIES



Presenters

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PPL Electric Utilities

- ◆ An Electric Distribution Company in central and eastern Pennsylvania
- ◆ Serves approximately 1.4 million customers in 29 counties
- ◆ Owns and maintains more than 48,000 miles of power lines
- ◆ Consistently wins awards and ranks high among other electric distribution companies in the United States for customer service and satisfaction



PPL Low Income Programs

- ◆ On-Track Program
 - ◆ Reduced monthly electric bills payments
 - ◆ A chance to erase any debt you owe



PPL Low Income Programs

- ◆ Winter Relief Assistance Program
 - ◆ Energy Education
 - ◆ May include weatherization
 - ◆ Direct installation of measures such as lighting and appliances



PPL Low Income Programs

- ◆ Operation Help
 - ◆ Provides emergency financial aid to pay heating bills for families with financial hardships



PPL Low Income Programs

- ◆ LIHEAP
 - ◆ LIHEAP is a grant you do not have to repay for the help you receive



PPL Electric Utilities Act 129 Programs

- ◆ Behavior and Education Program
 - ◆ Home energy reports that are sent via US mail and email to low income customers
- ◆ E-power-wise
 - ◆ Energy efficiency kits that contain energy savings measures
 - ◆ Distributed through Community Based Organizations



PPL Electric Utilities Act 129 Programs

- ◆ Community in Action
 - ◆ One component of the student and parent education program
 - ◆ Targets low income schools
 - ◆ Provides mini grants

Who, What, Where and Why



**Targets Low
Income
Schools**

**Provides School
Mini-grant
Money**



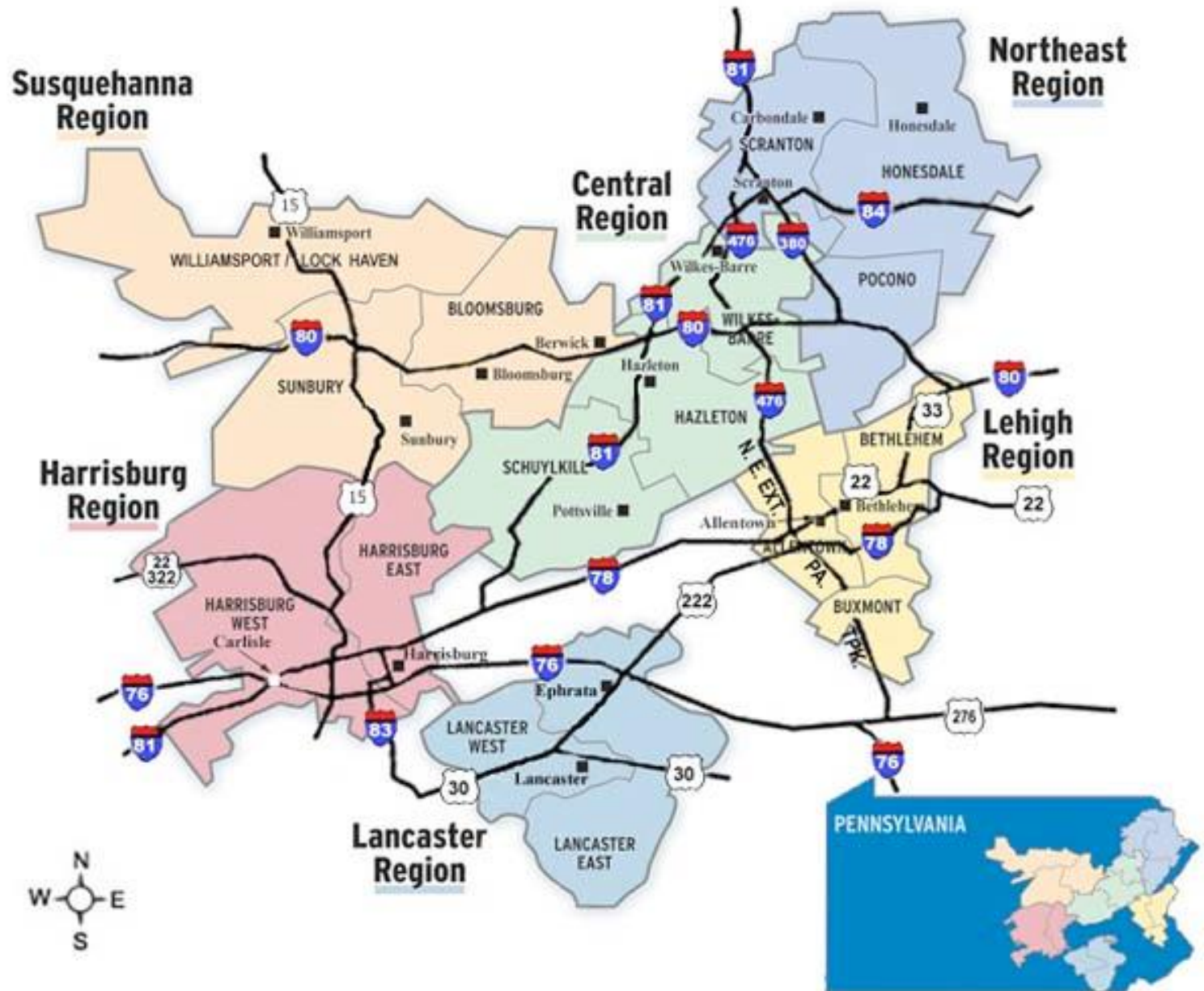
\$200 - \$1,000



Brought to you by:



PPL ELECTRIC UTILITIES SERVICE TERRITORY



- **Think!** about energy.
- **Talk!** about energy.
- **Take Action!** now about our energy for today and the future!



- ¡Piense!
- ¡Hable!
- ¡Tome Acción!



What is Energy?

Energy is the ability *to do work* and *produce change*.

Today we are talking about *Energy*.

- Where it comes from.
- How we use it.
- How we can be energy efficient.

La energía es la capacidad de trabajar y producir un cambio.



Virtually everything we do or use at home and at work uses energy.

- Todo lo que hacemos requiere alguna forma de energía.

Natural Resources



Los Recursos Naturales



In the Commonwealth of Pennsylvania...

- En el Mancomunidad de Pennsylvania ...



Nonrenewable 96%
Renewable 4%

The Commonwealth of Pennsylvania's mix

- Mezcla del Mancomunidad Pennsylvania

Where Does Your *Energy* Come From?



Nonrenewable Resources

- Coal 38%
- Nuclear 36.2%
- Natural gas 22%



Renewable Resources

- Other renewables 3%
- Hydro 1%



- ¿De dónde viene la energía?

Wise Energy Management



Electricity

Natural Gas

Water

Wood



- Gestión racional de la energía

How Do We Use Electricity?



¿Cómo usamos la electricidad?

Electric Safety - Inside



DO ...

- ✓ Do use outlet caps.
- ✓ Do unplug appliances using the rubber plug – not the cord.

DON'T ...

- ✗ Don't stick anything in outlets except plugs.
- ✗ Don't overload outlets.
- ✗ Don't touch frayed cords.
- ✗ Don't mix water and electricity.



- Utilice tapones con tomas de corriente.
- Desenchufe los aparatos eléctricos.
- No sobrecargue las tomas de corriente ni meta cualquier cosa excepto los enchufes.
- Mantenga todos los aparatos eléctricos lejos del agua.

Electric Safety - Outside



- ✓ Stay away from downed power lines.
- ✓ Go inside when there is a storm.
- ✓ Call 811 before you dig.
- ✗ Don't play around electric equipment.
- ✗ Don't climb trees near power lines.
- ✗ Don't fly kites around power lines.
Let go immediately if the kite gets near wires.



- Manténgase alejado de las líneas de alto voltaje derribadas.
- No te quedes cerca equipamiento eléctrico.
- Llame a 811 antes de excavar.
- No treparse a los árboles cercanos a las líneas de energía.
- No vuele cometas cerca las líneas de energía. Deje ir de la cometa inmediatamente si se obtiene en los cables eléctricos.
- Entre en la casa cuando hay una tormenta

How The Current Affects You



ENERGIZED WIRE

Stay clear, not near!



Electric Current in mA

you can feel a tingle 1-5

shock, can't let go 5-10

painful, breathing
may become
difficult 10-50

loss of muscle control
probably fatal 50-100



Milliamp (mA) = 1/1000 Ampere

- Cómo la Corriente le Afecta
- Manténgase alejado de las líneas de energía. Las líneas de energía pueden "arc" conectar electricidad a su cuerpo. Manténgase alejado, no cerca! Puede sentir un cosquilleo. Choque, no puede dejarlo. Dolorosa, la respiración puede resultar difícil. Pérdida del control muscular, probablemente mortal. "Milliamp" (mA) = 1/1000 Amperios.

Controlling Consumption







Energy efficiency is using less energy to accomplish the same amount of work.

LEDs are a great example.



- Eficiencia energética está usando menos energía para realizar la misma cantidad de trabajo.


How can you be more energy efficient with electricity?



- Behavior – Turn off lights when you leave a room.
- Technology – Replace light bulbs with LEDs (Light Emitting Diode) bulbs. They use up to 75 percent less energy than incandescents and last up to 20 times longer.

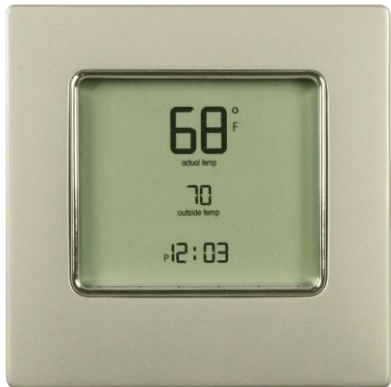
- ¿Cómo se puede ser más energía eficiente con el uso de la electricidad?
- Comportamiento: Apague la luz cada vez que sale de un cuarto.
- Tecnología: Reemplace bombillas con las LED. Ellas usan hasta un 75 por ciento menos energía que las incandescentes y duran hasta 20 veces más

How can you be more energy efficient with electricity?

- 
- Behavior – Turn off TVs, computers and game consoles when you are not using them.
 - Technology – Beware of phantom loads! Use a smart power strip to reduce energy waste.

- ¿Cómo se puede ser más eficiente con el uso de la electricidad?
- Comportamiento: Desactive televisores, computadoras y consolas de juego cuando no esté utilizando.
- Tecnología: ¡Cuidado con cargas fantasmas!
- Utilice un enchufe protector para reducir el desperdicio de energía.

How can you be more energy efficient with electricity?



- Behavior – Adjust the thermostat for the season.
- Technology – Use a programmable thermostat and set it to adjust the temperature when nobody is home.

¿Cómo se puede ser más eficiente con el uso de la electricidad?

- Comportamiento: Ajustar el termostato de la temporada.
- Ajuste el termostato en el invierno a 68 F, esta es una temperatura recomendable, o incluso inferior.
- En el verano, ajuste la temperatura a 78 F.
- El ajustar la temperatura de un grado o dos puede hacer una gran diferencia. ¡Pruébalo!
- Tecnología: Utilice un termostato programable y configurarlo para ajustar la temperatura cuando no hay nadie inclusive.

How can you be more energy efficient with electricity?



- Behavior
 - Dishwasher - fully loaded.
 - Wash clothes in cold water and when fully loaded.
- Technology
 - Set temperature on hot water heater to 120 F.

- ¿Cómo se puede ser más eficiente en lavar los platos y la ropa?
- Comportamientos:
 - Lave platos en un lavaplatos sólo cuando está completamente lleno.
 - Lave ropa en agua fría.
 - Lave ropa en la lavandería solo si tiene toda la capacidad.
- Tecnología: Ajuste la temperatura en el calentador de agua a 120 F.

How can you be more energy efficient with recycling?



- Use both sides of paper.
- Recycle all types of paper products and buy recycled products.
- Recycle your refrigerator with PPL Electric Utilities.
- Recycle your CFLs at local stores or go to www.ppelectric.com/lighting.

¿Cómo se puede ser mas eficiente con el reciclaje?

- Utilice ambas caras del papel.
 - Recicle todo tipo de productos de papel y comprar material de origen reciclado.
- Recicle su refrigerador con PPL Electric Utilities.
- Recicle las bombillas CFL en las tiendas locales o visite a www.ppelectric.com/lighting.

Track Your Electricity Usage



COMMUNITY IN ACTION
e power
PPL ELECTRIC UTILITIES

REDUCE YOUR USE

January	February	March	April	May	June
July	August	September	October	November	December
TOTAL kWh LAST YEAR: _____				TOTAL: _____	kWh

TRACK YOUR ELECTRICITY USE BY MONTH

- El seguimiento de su uso de electricidad

Community in Action Booklet



Look inside your

Community in Action Booklet

Discover more about:

- ⑩ energy.
- ⑩ energy efficiency.
- ⑩ tips to save energy and money in your home.
- ⑩ what it costs to light your home.



How much does it cost to light your home?



Discover how much money you would save if all the light bulbs in your home were LEDs.

Take a walk around your home with your family to survey the lighting.

1. Count the bulbs in each room and record it in **Table 1**.
2. Transfer this information into Column A on **Table 2**.
3. Multiply the numbers in Column A by the given amounts in Column B, place the answers in Column C.

TABLE 1		
LOCATION	Incandescents	LEDs
Bedroom 1		
Bedroom 2		
Kitchen		
Dining room		
Living room		
Hallway		
Laundry room		
Family room		
Front porch		
Other		
TOTAL		

TABLE 2			
	A	B	C
	Number of bulbs (from Table 1)	Annual cost of electricity for one bulb	Current annual cost of electricity
INCANDESCENT	X	\$4.19	=
LED	X	\$0.88	=
TOTAL			

\$0.88	=	Annual cost of electricity with only LEDs
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4. Discover how much money you will save if all the bulbs in your home were LEDs. Multiply the total number of bulbs in your home by the annual cost of electricity for one LED. How does this total compare with your current total in Column C?



Work together to save energy.

- Trabajando juntos para ahorrar la energía

Please complete...and return.



Home Energy Worksheet

**Community in Action
Home Energy Worksheet**

School ID

School Name

City

Zip

Name (optional)

Address (optional)

1. What is the main source of heat in your home?
 Electricity Natural gas Gas
 Wood or geothermal Other fuel

2. If you have a furnace, how old is it?
 0 - 5 yrs 6 - 10 yrs 11 - 15 yrs
 16+ yrs NA

3. How would you rate the condition of your furnace?
 Works well all the time
 Works well most of the time
 Needs to be replaced

4. What type of housing do you live in?
 Single-family Multi-family Other

5. How old is your home?
 0 - 5 yrs 6 - 10 11 - 15
 16 - 20 21-30 31+

6. How is your water heater?
 Natural gas Electricity
 Propane or other method

7. How old is your water heater?
 0 - 5 yrs 6 - 10 yrs 11 - 15 yrs
 16+ yrs Don't know

8. How would you rate the condition of your water heater?
 Works well all the time
 Works well most of the time
 Needs to be replaced

9. Does your home have an air conditioner?
 No Yes, central
 Yes, room Yes, other

10. If you have room air conditioners, how many are in the home?
 1 2 3
 4 5+ NA

11. If the answer to question #9 is yes, how old is the unit or system?
 0 - 5 yrs 6 - 10 yrs 11 - 15 yrs
 16+ yrs NA

12. How would you rate the condition of your air conditioner?
 Works well all the time
 Works well most of the time
 Needs to be replaced

13. How many people live in your home?
 1 2 3 4 5
 6 7 8 9 10+

14. If you have a programmable thermostat, what temperature do you typically set for the summer months?

15. If you have a programmable thermostat, what temperature do you typically set for the winter months?

Evaluation

Community in Action Forum Evaluation

Participants: Please take a moment to answer the following questions. You may leave the survey at the registration table. Thank You!

School ID

School name

City

Zip

Name (optional)

Address (optional)

1. How would you rate the information in the presentation?
 Very helpful Somewhat helpful Indifferent Not helpful

2. How effective were the presenters in communicating information concerning the *Home Energy Worksheet Scan Form* and kit contents?
 Very helpful Somewhat helpful Indifferent Not helpful

3. How would you rate the overall **Community in Action** forum in its ability to assist your household with its energy use?
 Very helpful Somewhat helpful Indifferent Not helpful

4. What was the most useful part of the **Community in Action** forum?

5. Suggestions/Comments:

THINK ENERGY is a registered trademark of National Energy Foundation.

• Energía en el Hogar Hoja de Trabajo

• La Evaluacion

and pick up your
Community in Action Kit.



- y recoja su "kit", Acción en la Comunidad



Thank you for participating!

Brought to you by:

