ENERGY IS EVERYWHERE!

U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

Power Over Energy and Energy Savers

April 16, 2015

Webinar Series sponsored by Housing and Urban Development, Department of Energy and Department of Education

Webinar Agenda

- Welcome and Intro to Webinar Series (DOE)
- Power Over Energy
  - Facebook Digital Campaign for Sharing Energy Information and Tips
- Energy Saver
  - Projects and Tips to start engaging residents today
- Q & A

You are on mute! Use your webinar bar to fill out poll or chat to send in a question.

Email energyliteracy@ee.doe.gov about the Energy is Everywhere Webinar Series

Welcome

- Power of Social Media in Energy
  - Reach residents where they are engaged.
  - Use images and facts to draw attention to Energy
- Consumer Education is key to reducing energy consumption
  - Do you know how to find a lightbulb?
  - Read the Energy Guide found on material?
  - Know what the Energy Star symbol means?

Easy action steps to reduce energy consumption today!

Consumer Education and Engagement

Lisa Magnuson, Silver Spring Networks

The more people know. The more they act.

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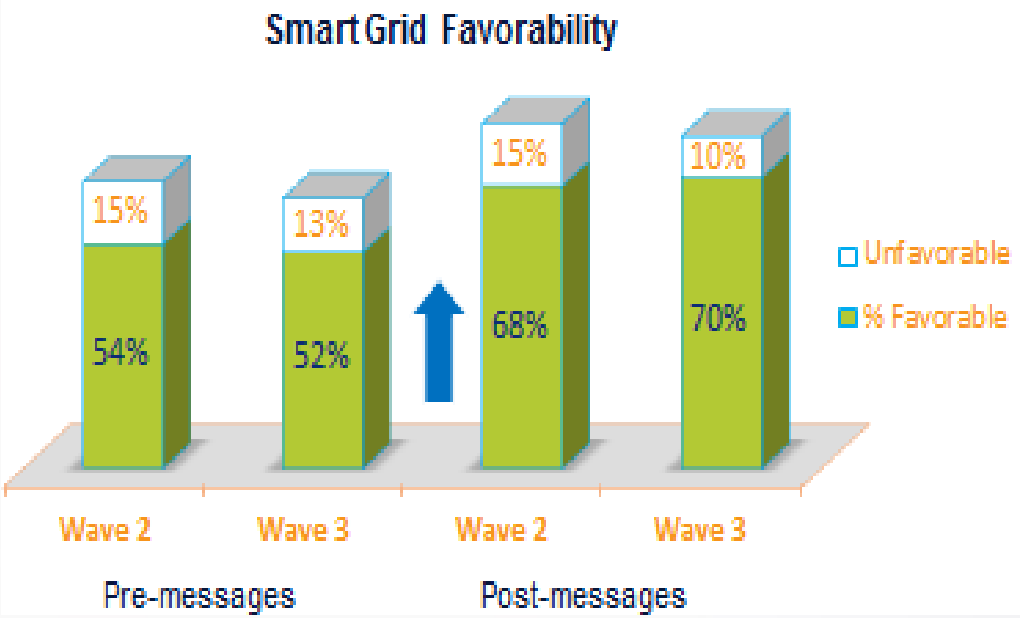
Proactive Customer Engagement is *critical*

- The more consumers know, the more receptive they are to smart grid
- Engages customers. Involved customers = happy customers*
- Creates opportunities to underscore utility position as trusted advisor **



*Consumer understanding and favorability increases after education****

*JD Powers Consumer Engagement Study, July 2013

**Accenture New Energy Consumer Research, June 2013

*** Smart Grid Consumer Collaborative Research Study, January 2013

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RESOURCES TO EDUCATE AND ENGAGE YOUR RESIDENTS

- Power Over Energy: www.facebook.com/poweroverenergy
- A Smart Energy Future: www.asmartenergyfuture.com
- Green Ninja: http://greenninja.org
- Pinterest: https://www.pinterest.com/poweroverenergy/
- YouTube: www.youtube.com/poweroverenergy

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POWER OVER ENERGY.ORG

A grassroots energy literacy campaign

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Power Over Energy Goals

1. **Generate awareness** about our energy challenges
2. **Educate consumers** about energy efficiency and benefits of renewables and the smart grid
3. **Engage consumers** in the energy conversation

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Results

1. **Generate awareness** about our energy challenges
   - Reached over **88 million consumers** worldwide
2. **Educated consumers** about energy efficiency and benefits of renewables and the smart grid
   - Over **348,000 Facebook likes**: Quarterly growth +25%
3. **Engaged consumers** in the conversation
   - Likes, Comments, Shares: Quarterly growth: **+32%**
   - Engagement Rate: **5.51%** (Facebook average: 0.52%)
4. **Across multiple channels**
   - **297,000** YouTube views
   - Over **1300** Twitter followers
5. **Global**: US, Brazil, Japan, Malaysia, India

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Generating awareness…

Facebook: Surpassed 348,000 Likes

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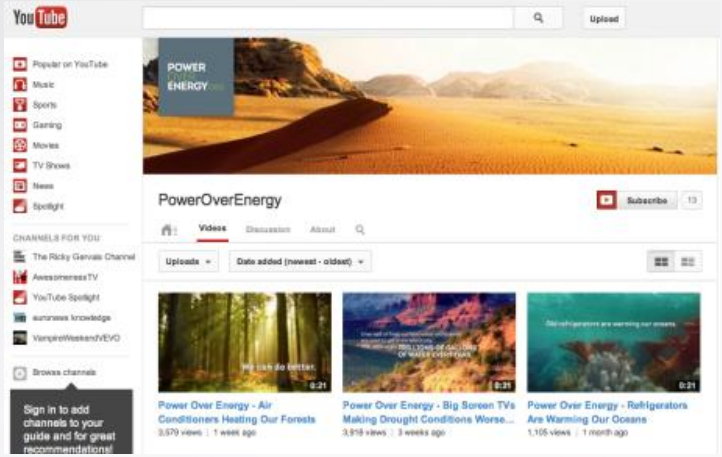
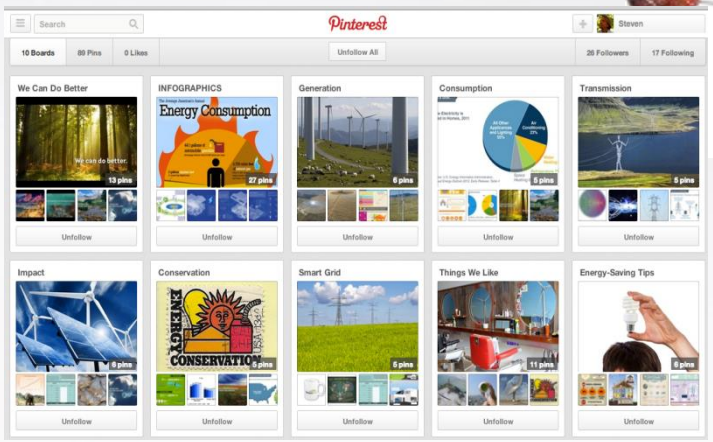
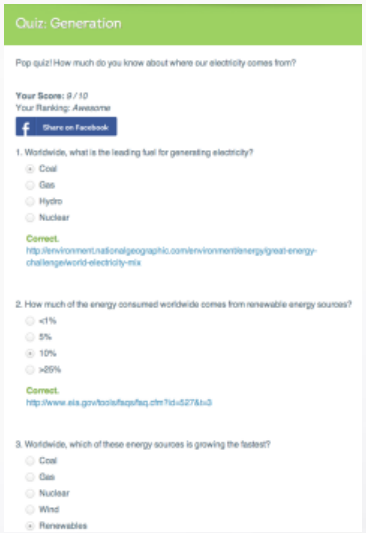
…across multiple social media channels







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…resonating worldwide

Weekly Facebook Reach

Country	People Reached
Brazil	276,739
India	188,594
Malaysia	170,000
United States of America	149,022
Puerto Rico	7,995
United Kingdom	4,609
Canada	3,053
Indonesia	1,790
Australia	1,641
Pakistan	1,044

City	People Reached
Kuala Lumpur, Malaysia	35,785
New Delhi, Delhi, India	23,890
Mumbai, Maharashtra, India	23,220
Calcutta, West Bengal, India	19,706
Bangalore, Karnataka, India	16,868
Chennai, Tamil Nadu, India	12,817
Rio de Janeiro, Brazil	10,771
São Paulo, Brazil	10,076
Johor Bahru, Johor, Mala…	9,197
Delhi, India	7,094

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…with optimal results

Power Over Energy Click-Through Rates:	**1.08%**
Optimal Facebook Click-Through-Rates:	0.11 – 0.16%
Average Facebook Click-Through Rates:	0.05%
Power Over Energy Cost-Per-Click:	**$0.13**
Average Facebook Cost-Per-Click:	$0.53

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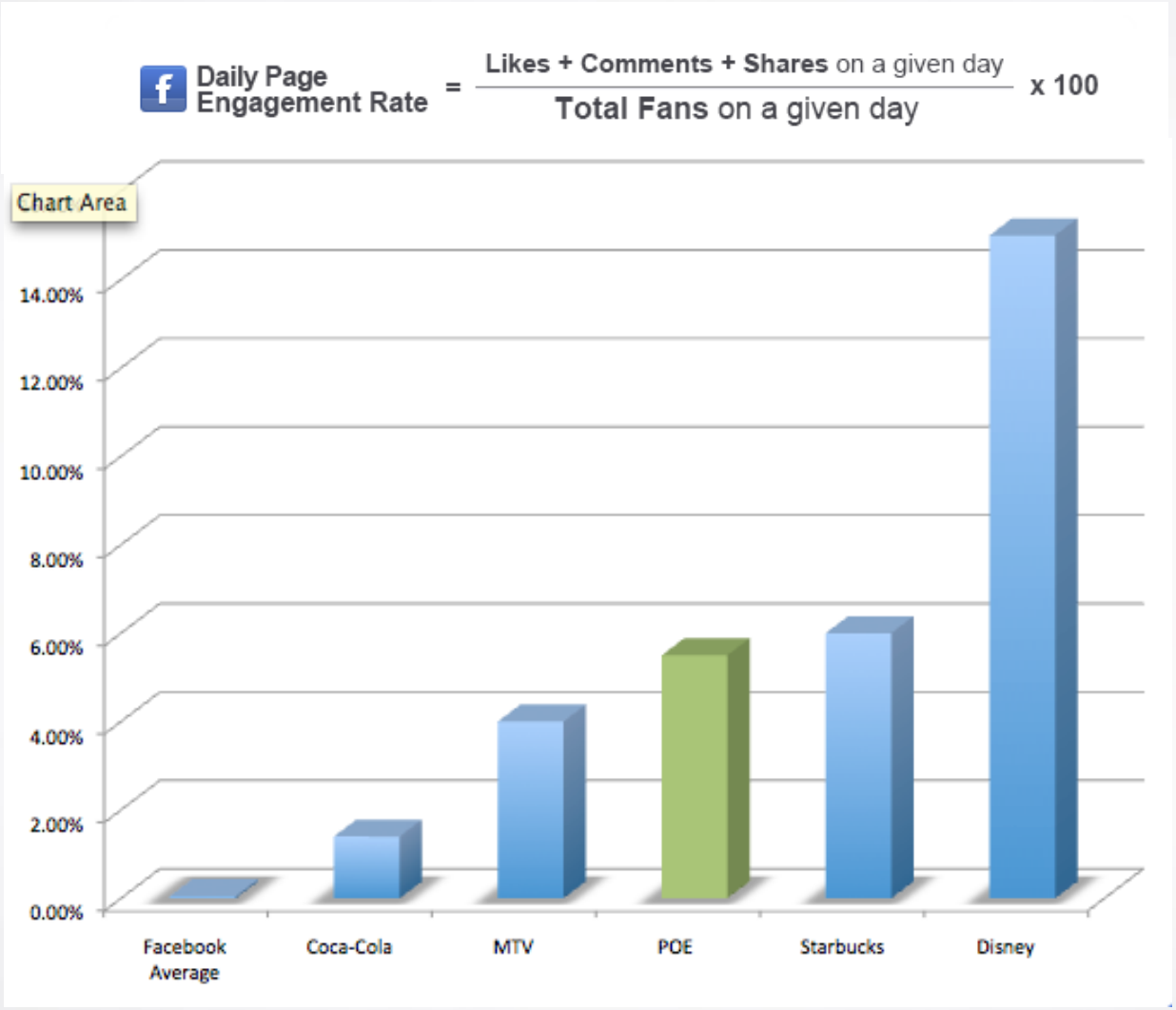
…and leading engagement rates.



Source: Simply Measured Top Brands on Facebook Study, 2013

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What we've learned to date

- People *are* interested in learning more about energy, around the world and in India
- All consumers responded, regardless of "tag"
- Images and videos are most engaging
- Renewables, DIY, and Energy saving tips are the most popular content
- Join us: www.facebook.com/poweroverenergy

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A Smart Energy Future Curriculum

- The curriculum consists of three units that can be taught over 5-15 days.
  - Unit 1 focuses on energy concepts and the smart grid
  - Unit 2 discusses careers in the energy industry
  - Unit 3 explores solar and renewable energy

- Each unit features lessons on energy concepts, interactive assignments and community-facing projects designed to encourage middle and high school students to learn about the benefits of the smart grid, solar energy, and engage them in career exploration activities relating to the energy industry.

- The units include worksheets for photocopying, a keyword glossary, an extensive list of resources, and detailed lesson plans so teachers can easily adapt the materials for classroom presentations.

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About the Curriculum

Our Goal:

- Encourage middle and high school students to learn about the benefits of the smart grid and engage them in career exploration activities relating to the energy industry.

Our Target Audiences:

- Middle and high school students, their parents, and teachers.
- School superintendents, administrators, STEM associations and others, who would act as advocates to encourage teachers to use the curriculum.

The Curriculum Program Includes Additional Support, Including:

- Conducting outreach to science, technology, business and careers teachers, as well educators focused on other subjects.
- Outreach to partners with local and state education associations.
- Activating an advisory board comprised of local community leaders to review and support the curriculum program.
- Having the curriculum evaluated to meet state testing standards.
- Drafting and placing guest blogs by teachers and others for website, local communi publication.

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Three Curriculum Units

Unit 1: Benefits of a Smart Grid

- This unit introduces students to a new system of interacting technologies—a smart grid—that is now being tested and implemented in many towns and cities around the country and around the world. The unit will familiarize students with energy usage in their own homes, connect that usage to the current energy grid and energy sources, and introduce the smart grid and its technologies and benefits.

Unit 2: Careers in the Smart Grid Industry

- In this unit, students research existing jobs in the energy industry and explore ways they will be affected and enhanced by smart grid technologies. Students will create a career profile for a print or online energy career guide, which will include information about career preparation, responsibilities, and actual work scenarios. Sharing their career profiles will allow students to educate peers about promising job opportunities.

Unit 3: Solar Power and Renewable Energy

- This unit introduces students to solar and renewable energy as a core element of A Smart Energy Future. It provides students with in-depth knowledge about the science and circuits behind solar technology and other energy sources, and their diverse application in the United States and around the world.

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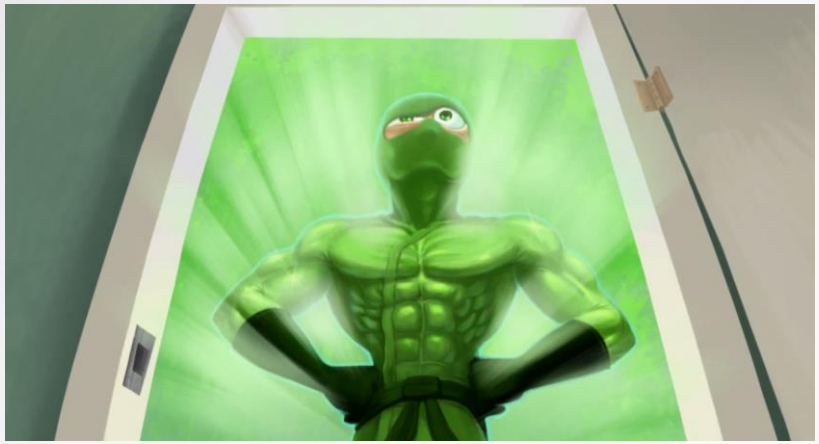
GREEN NINJA



Animations

Films

- Engaging media about climate solutions
- Teacher curriculum and training
- Student centered hands on learning
- University non profit (greenninja.org)

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GREEN NINJA

Footprint Renovation <Video Link>

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NOW, WHAT DO I DO?

- Get a Facebook account
- Like Power Over Energy on Facebook, like and share as you see interesting
- Download the curriculum units from www.asmartenergyfuture.com/curriculum
- Watch Green Ninja videos

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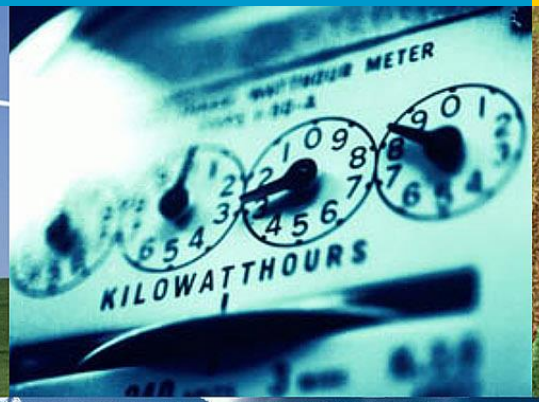
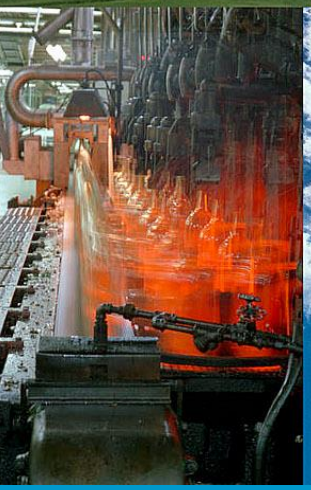
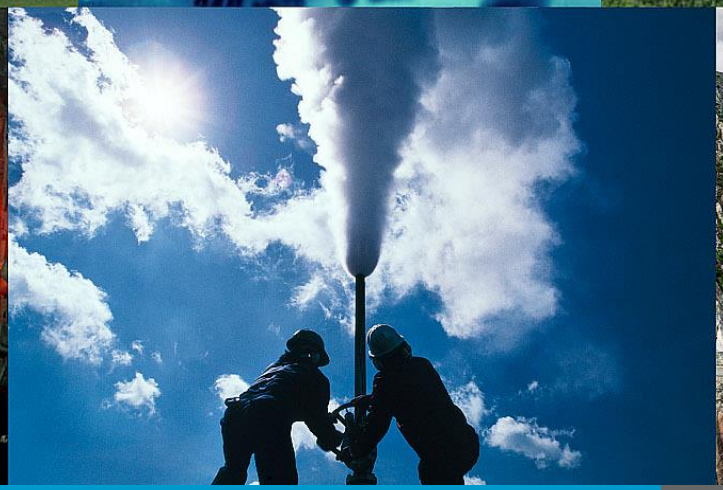
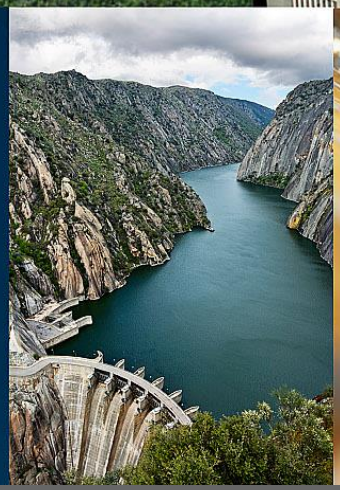
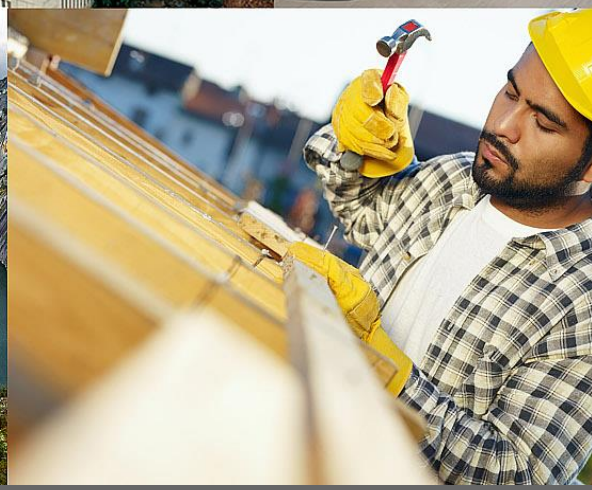




Energy Saver:

Save Money, Save Energy

Paige Terlip, National Renewable Energy Laboratory

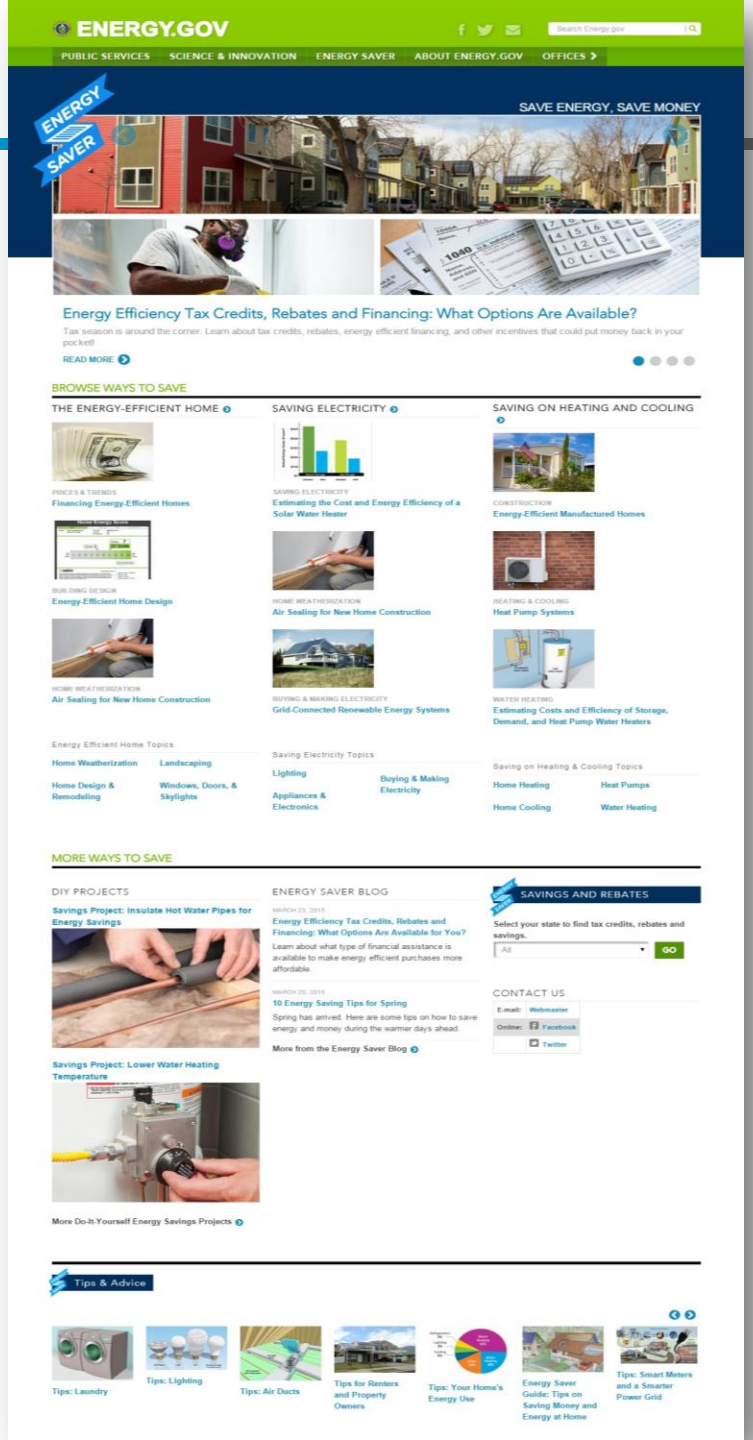
4/16/2015

What is Energy Saver?

Energy Saver is EERE's and DOE's consumer resource for home energy efficiency.

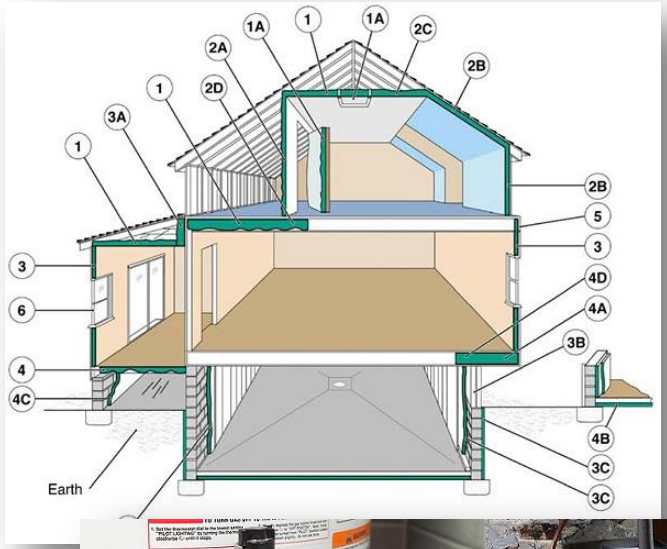
It includes:

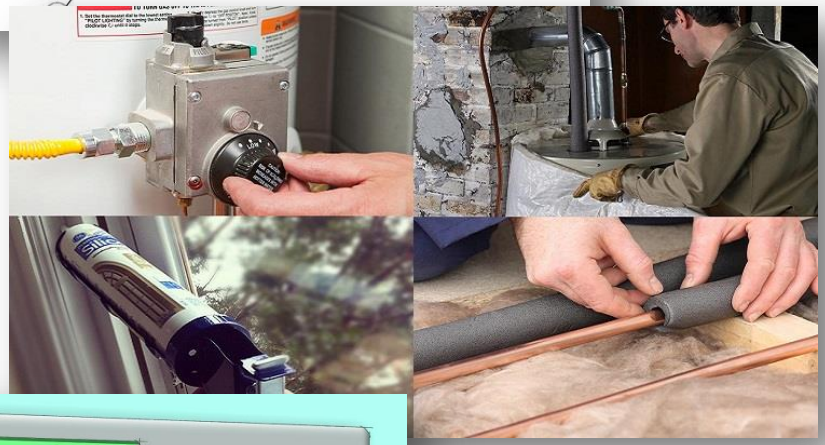
- Energy Saver Website: energysaver.gov
- Energy Saver Facebook: facebook.com/energysavergov
- Energy Saver Twitter: @EnergySaver
- *The Energy Saver Guide: Tips on Saving Money and Energy at Home*
- Energy Saver Blog
- Infographics



Energy Saver Website

- **DIY Savings Projects**
  - Lowering water heater temperature
  - Insulating hot water pipes
  - Insulating hot water tank
  - Installing storm windows
  - Sealing air leaks with caulk
  - Weatherstripping double hung (or Sash) windows
  - Insulating and Air Sealing Floors Over Unconditioned Garages
  - Creating an Attic Stairs Cover Box
- **Select popular articles**
  - Estimating Appliance and Home Electronic Energy Use
  - Do-It-Yourself Home Energy Audits
  - Thermostats





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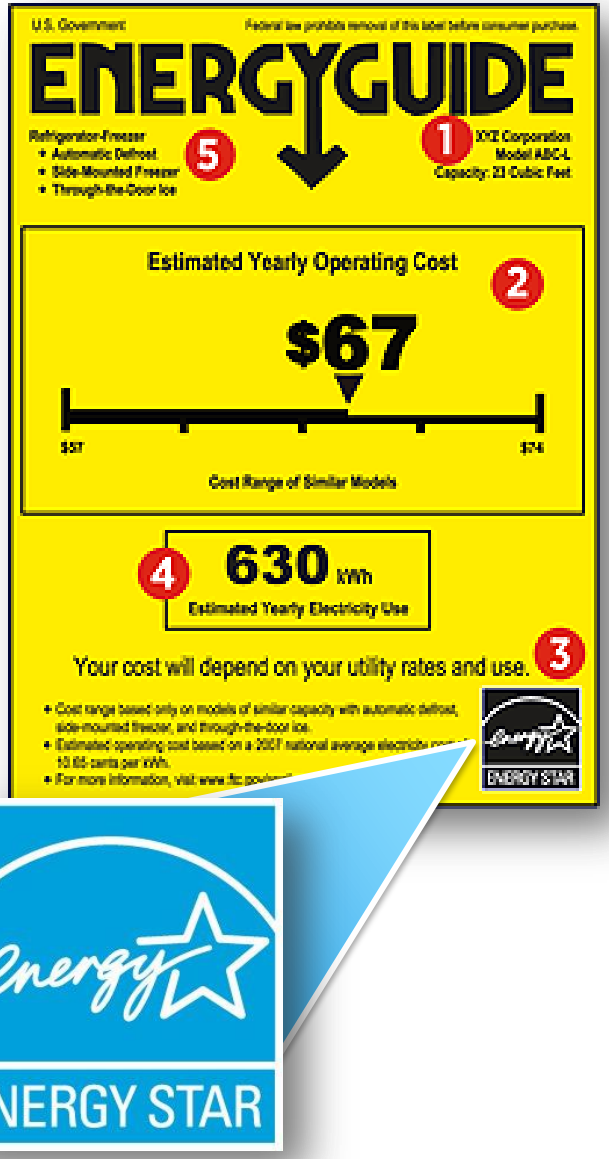
Energy Saver Website

- **Infographics**
  - Home Cooling
  - Landscaping
  - Home Heating
  - Water Heating
  - Home Energy Audits
  - Your Energy Efficient Home
  - Advanced Power Strips
- **Blog**
- **Tax Credits, Savings & Rebates search tool**

Understanding Energy Use

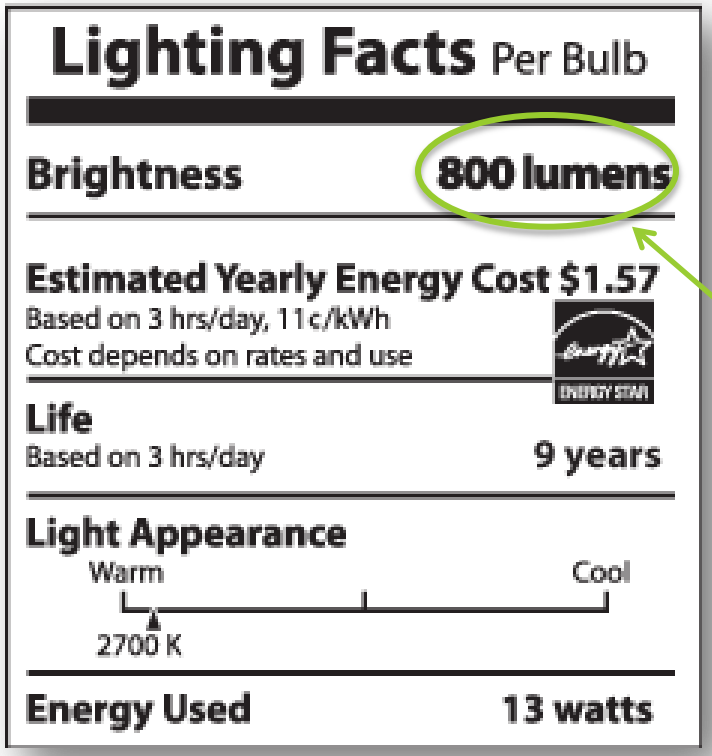
The EnergyGuide label is required on all appliances. It provides information about energy consumption and shows how much energy an appliance uses compared with similar models.



1. Maker, model number, and size of the appliance.
2. Estimated yearly operating cost (based on the national average cost of electricity), and the range of operating costs for similar models.
3. The ENERGY STAR® logo indicates that this model meets strict criteria for energy efficiency.
4. Estimated yearly electricity consumption.
5. Key features of the appliance and the similar models that make up the cost comparison range.

Lighting Choices to Save You Money

When shopping for lighting, use the Lighting Facts label and lumens to compare bulbs and purchase a bulb with the amount of brightness you want.



Lighting Facts Label

- Brightness, measured in lumens
- Estimated yearly energy cost
- Lifespan
- Light appearance, measured on the Kelvin (K) scale, from warm to cool.

Lumens measure the brightness of a bulb.

To replace a 100 watt (W) incandescent bulb, look for a bulb that gives you about 1600 lumens.

Little Changes Can Equal Big Savings

TIPS FOR CUTTING YOUR HEATING BILLS

In winter months, open your curtains during the day to naturally heat your home and close them at night to keep the heat inside.

Use a programmable thermostat to set your heater back while you are away or asleep.

Consider air sealing your home and adding insulation to your walls and attic to help retain your home's heat. Up to 25 percent of your home's heat is lost through small cracks and holes throughout your home.

Seal your air ducts, and make sure they are properly insulated when they are installed in an unheated area of the home, such as an attic or crawlspace.

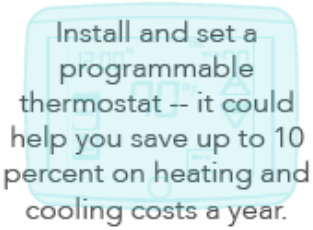
Weatherstrip around your doors and windows to keep warm air from escaping.

Set your ceiling fan to spin clockwise to blow the rising hot air down.

Make sure your chimney is clean.

Little Changes Can Equal Big Savings

Tips for Lowering Your Cooling Costs



Install and set a programmable thermostat -- it could help you save up to 10 percent on heating and cooling costs a year.

Use a fan. Ceiling fans will allow you to raise the thermostat setting about 4 degrees without impacting your comfort.

Insulate your attic and walls, and seal cracks and openings to prevent warm air from leaking into your home.

Insulate and seal ducts -- air loss through ducts accounts for about 30 percent of a cooling system's energy consumption.

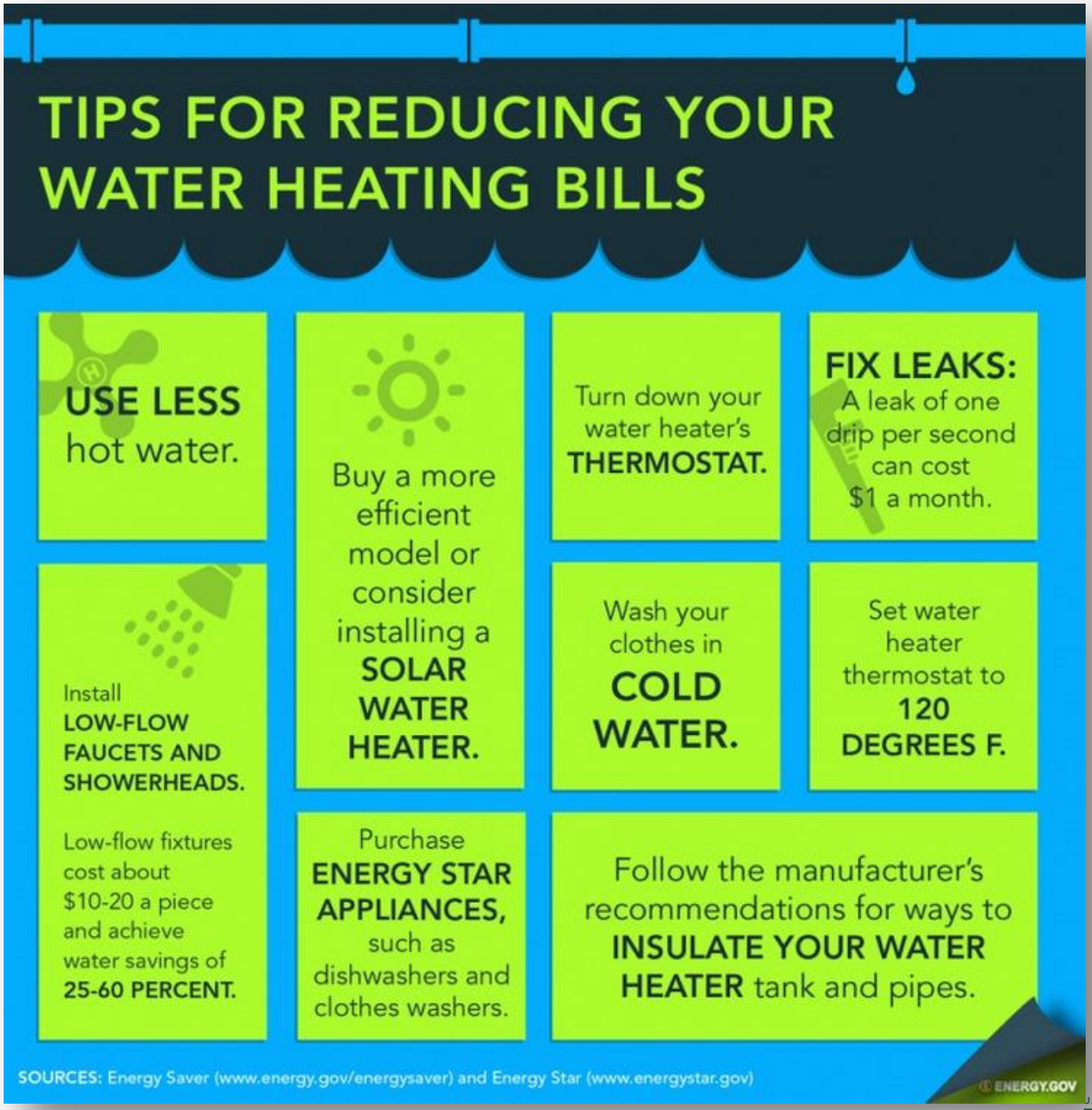
Don't heat your home with appliances. On hot days, consider using a outdoor grill instead of your oven.

Install energy-efficient window coverings that let natural light in and prevent solar heat gain.

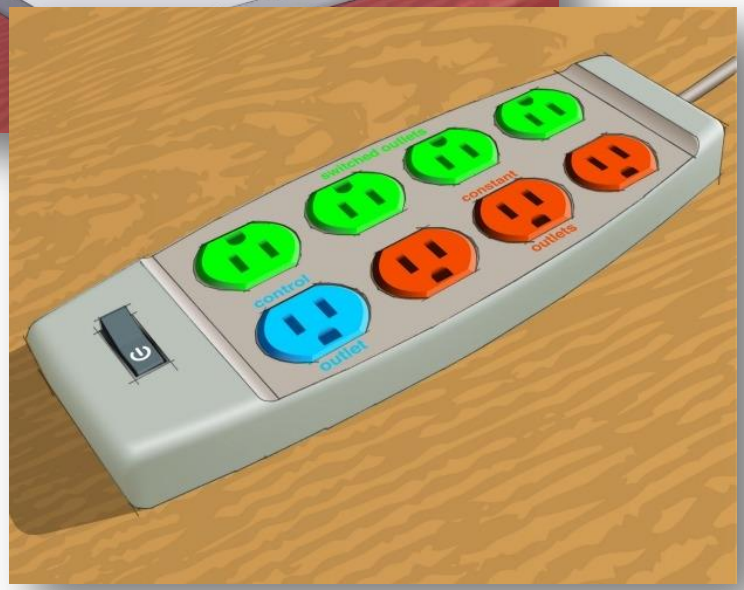
Buy an ENERGY STAR-qualified AC unit -- on average, they're up to 15 percent more efficient than standard models.

Use the bathroom fan when taking a shower or bath and a range hood when cooking -- this helps remove heat and humidity from your home.

Little Changes Can Equal Big Savings



Little Changes Can Equal Big Savings



Home electronics tips

- Turn off the monitor if you aren't using your PC for more than 20 minutes.
- Turn off both the CPU and monitor if you're aren’t using your PC for more than 2 hours.
- Don’t use screen savers on your computer.
- Unplug appliances, or use a power strip and use the switch on the power strip to cut all power to the appliance, to avoid "vampire" loads.
- Use rechargeable batteries for products like cordless phones and digital cameras.

Little Changes Can Equal Big Savings

Laundry tips

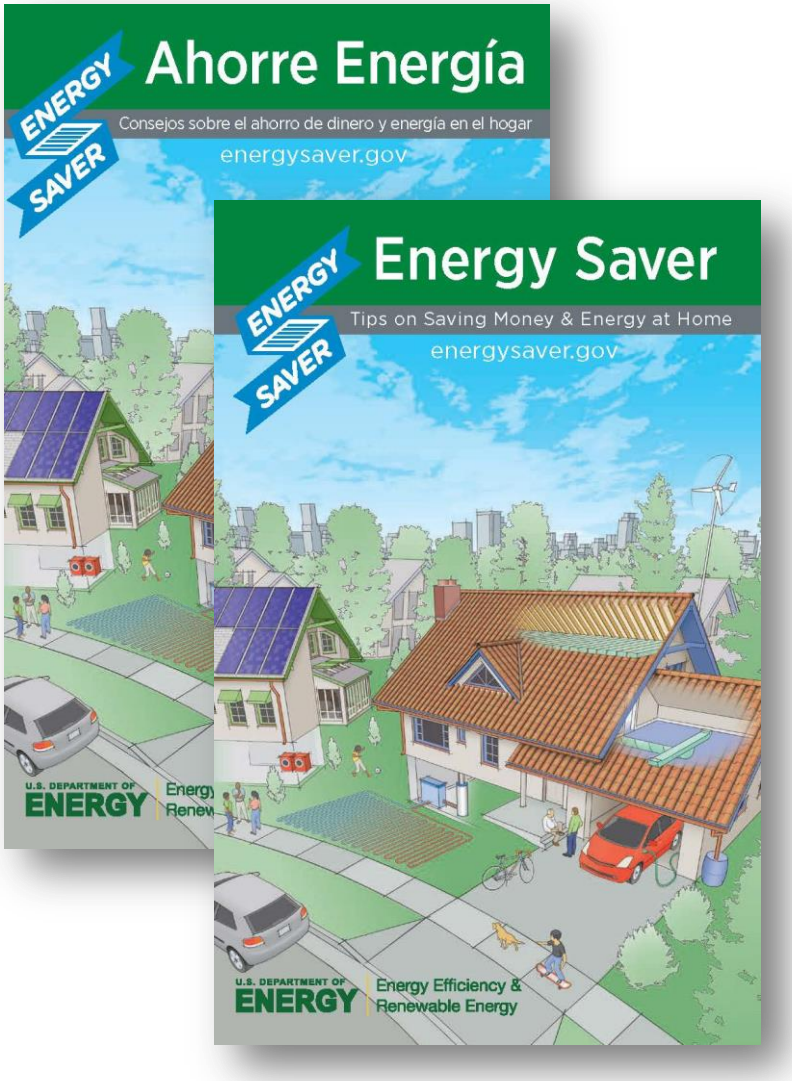
- Wash clothes in cold water.
- Try to only wash and dry full loads.
- Dry towels and heavier cottons in a separate load from lighter-weight clothes.
- Clean the lint screen in the dryer after every load to improve air circulation and prevent fire hazards.
- Remove the lint in the lint screen slot of your clothes dryer with a vacuum nozzle.
- Inspect your dryer vent to ensure it is not blocked.
- Consider air-drying clothes on clothes lines or drying racks.

Energy Saver Guide

- Tip Web pages

  Examples:

  - Appliances
  - Lighting
  - Transportation
  - Programmable thermostats
  - Air sealing
- Printed Booklet (available to order)
- E-book: ePUB | MOBI
- PDF: English | Spanish



Energy Saver Social Media

- Daily posts with tips and information about saving energy at home
- Monthly themes across social media and website content
- #AskEnergySaver
- Quarterly Campaigns:
  - **November**: Energy Faceoff
  - **January**: Energy Saver Resolutions
  - **April**: Count down to Earth Day
  - **Upcoming (July)**: Energy Saver Lighting

Other Resources

- Office of Energy Efficiency and Renewable Energy
  - Energy 101 videos
  - Energy Basics
- ENERGY STAR
- Fueleconomy.gov
- Home Energy Saver
- DSIRE
- Energy Information Administration

Questions and Contact Us

Questions: Type in the questions/chat box.

We are interested in your feedback on the Energy Is Everywhere Series!

energyliteracy@ee.Doe.gov