Energy Conservation and Energy Efficiency: What's the Difference?



MESSAGE FROM MANAGER ALAN LESLEY

n the 1980s, President Reagan was quoted as saying that conservation meant being cold in the winter and warm in the summer. Conservation seemed to get a bad rap in the decades to follow. It implied having to make do with less. And sometimes, it meant going without altogether.

Today, the terms energy conservation and energy efficiency are often used synonymously, but they have distinct definitions. I like how the U.S. Energy Information Administration differentiates the two.

That difference has to do with behavior and technology.

Energy conservation simply means using less energy. To achieve it, consumers have to change their behaviors—turning off lights, unplugging appliances or opting to use a clothesline instead of a clothes dryer. Conserving energy often means sacrificing something.

While there is merit in adopting conservative energy-consumption habits to avoid waste, we have the option to use less energy without having to give up comfort or convenience.

That brings me to the definition of energy efficiency.

Energy efficiency involves applying technology to use less energy while getting the same result or service. Technological advances also allow us to automatically perform some actions we used to have to do manually. Because new electric products are able to do the same tasks with less energy, energy efficiency does not necessarily come with the connotation of going without.

A compact-fluorescent lightbulb (CFL) is considered energy efficient because it uses less electricity to produce the same amount of light as an incandescent lightbulb. The CFL still lights up the room just the same.

In the same way, Energy Star-rated products are intended to deliver the performance consumers expect while using less energy. Take today's Energy Star-rated refrigerators, for example. They keep food cool with about half as much energy as refrigerators made before 1993, according to the U.S. Energy Information Administration.

Ultimately, energy efficiency may result in energy conservation—or using less energy.

I'd like to remind you why using less electricity is beneficial and why the principles of energy efficiency and energy conservation offer value to you, the member/owners of CECA. Perhaps most obviously, using less electricity saves you money on your electric bill simply because you consume less.

Also, wholesale power costs fluctuate depending on the time of use. The cost of power increases during peak hours—early mornings and evenings and seasons—hot summers and cold winters. In the early mornings, demand increases because we all wake up and turn on lights and appliances as we start our days.

Similarly, demand for electricity increases in the evenings because we arrive home from work, fire up the stove, turn on the TV and perhaps start a load of laundry.

And during the extreme temperatures of summer and winter, we demand electricity even more by blasting our air conditioners or heaters.

If we can diminish the use of power during those peak times, then

the cooperative's total wholesale power cost decreases. That savings is passed along to you.

In addition, those in the electricity industry, including CECA, are trying to find ways to reduce consumption because there could be a shortfall of electricity generation in the future. Creating energy-conserving and energy-efficient habits now will help us use electricity wisely years down the road.

I encourage you to use the principles of energy conservation and energy efficiency together. Just because you install an energyefficient CFL in the light fixture on your front porch doesn't mean you should leave it on 24/7. And even if you have an Energy Star-rated clothes dryer, be a good steward and think twice about running it with anything less than a full load.

By combining energy-efficient technology with conservative behavior, you can save electricity and money.

YIELDS of ENERGY EFFICIENCY

MORE OF THESE	LESS OF THESE
Quality/Performance	Money
Heating/Cooling	Pollution
Lighting	Energy
Productivity	Hassle
Control	Waste

Source: www.ase.org



Conservation MATTERS

THE LATEST NEWS AND INFORMATION ABOUT ENERGY CONSERVATION FROM YOUR ELECTRIC COOPERATIVE

The Value of Electricity

The price of electricity has gone up over the past 10 years, but not as much as the prices of some other commodities you purchase regularly.

A dozen eggs, for example, increased in price by 68 percent between April 2001 and April 2011, according to the U.S. Bureau of Labor Statistics Consumer Price Index. A pound of ground beef cost 56.3 percent more in 2011 than 2001, and the price of a loaf of white bread went up 40.9 percent. Gasoline prices shot up an average of 144 percent.

Electricity, however, remains a value. Per kilowatt-hour, the price of electricity has increased a relatively low 42.7 percent in the same time period.

CECA is dedicated to trying to keep the cost of electricity down. So the next time you pay your electric bill, compare the percent change in unit price to some of the other commodities you routinely purchase to understand the value of electricity.

Average price increases between 2001 and 2011:

CHECK OUT THE VALUE OF ELECTRICITY.

Next time you're at the grocery store, think about how the prices of bread, eggs and other consumer goods have risen over the years. Electricity remains a value!



RAISE THE TEMPERATURE A LITTLE SAVE A LOT

The U.S. Department of Energy says you can save IO percent a year on your heating and cooling bills by simply setting your thermostat IO degrees higher in summer or lower in winter—for eight hours. You can do this automatically without sacrificing comfort by installing a programmable thermostat.

But cranking your thermostat way up whenever you leave the house won't necessarily reduce your air-conditioning bill. HERE'S WHAT DOESN'T WORK:

 Changing the thermostat setting for short periods, several times a day.
If you'll be gone for less than six hours, leave your thermostat where it is.

2. Lowering the thermostat to 60 degrees when you get home to kick the the unit into high gear and cool the home quicker. That doesn't cool your home off any faster, but it will use more energy than if you set the thermostat to a reasonable temperature.

YOUR BEST BET: Set it and forget it. If you replace your old thermostat with a programmable model, you can set various schedules for work and sleep on weekdays and weekends—and let the thermostat "remember" when to change for the most efficient—and comfortable—result.

A CAUTION: Don't use a regular programmable thermostat with a heat pump. JOIN US FOR OUR



Saturday, August 6 *Comanche City Park*



Member Registration

Health Fair and Entertainment 9—10 a.m.

Business Meeting

10 a.m.

Door Prizes and Lunch *Immediately following business meeting*



Health Fair

Door Prizes • Drinks • Food • Elections



Entertainment by Class of '57

Lunch catered by Cook's Fish Barn

It's Grillin' Time

Summertime is grilling season especially when the Fourth of July rolls around—and burgers and hot dogs over a sizzling fire are a welcome sight at backyard barbecues across Texas. But fire anywhere else can make your family cookout memorable for all the wrong reasons.

Remember these rules of grilling:

For all grill types

• Only use your grill outdoors. Grills are fire hazards and some produce carbon monoxide, a deadly gas, so keep yours in a ventilated, open-air space.

• Keep children and pets away from the grill area. Young ones or Fido can knock grills over and start a fire or injure themselves or others.

• Keep your grill clean by removing grease or fat buildup from the grates and in the trays below the grates. Buildup can start a grease fire.

• Never leave your grill unattended.

For electric grills

• Don't expose cords, plugs or heating elements to liquids.

• Check grill for damage before operation and replace broken parts.

• Turn the unit off before plugging in or unplugging.

• Plug the grill into a ground-fault circuit interrupter outlet.

• Do not use the electric grill near combustible materials.

Don't use the grill in the rain.

For charcoal grills

• Use only charcoal starter fluid and never add any additional flammable liquids to a fire.

• Keep charcoal lighter fluid out of the reach of children and away from heat sources.

• Cool coals completely before disposing of them in a metal container.



For propane grills

• Check the gas tank hose for leaks before using it. If your grill has a gas leak but no flame, turn off the gas tank and grill. If the leak stops, get the grill serviced by a professional before using it again. If it does not stop, call the fire department.

• If you smell gas while cooking, immediately get away from the grill and call the fire department. Do not move the grill.

Always check the burn ban status in your area before lighting your grill.



HAPPY INDEPENDENCE DAY!

The offices of CECA will be closed Monday, July 4, in observance of the holiday.

WE WANT YOUR **Recipes**!

Do you have a favorite recipe you would be willing to share?

Comanche Electric Cooperative would love to have your recipes for a members-only cookbook. You might just see them in a future issue of this magazine or on our website! Send your submissions to:

CECA, Attn: Shirley Dukes, P.O. Box 729, Comanche, TX 76442 or sdukes@ceca.coop.



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Students at Blanket ISD participated in a mini-unit on rain forests and learned the overall importance of trees in our environment. After discussing the need for more trees, their benefit to the environment and to us, the students planted the trees as a windbreak to protect the tennis court.



The Zephyr fourth graders in Mrs. Courington's class each took home a forestry certificate indicating they had planted a tree. Mrs. Courington provided a lesson on Afghan pines, how to care for them and where to plant them in their yards. Students planted the extra trees on the Zephyr school grounds with the help of ag teacher Cooter Moore. This year's kindergarten class will be checking on the growth and progress of the trees.

Arbor Day

Way back in the 1870s, in a town in Nebraska, lived a man by the name of J. Sterling Morton. At that time, Nebraska was a treeless plain, and Morton did love his trees, so he set out to change the shape of his state by describing to Nebraska citizens what value, beauty and comfort the planting of trees would bring. Through his newspaper, Morton advocated tree planting and encouraged individuals and civic organizations to join his cause. He was so successful in his endeavor that one would no longer believe Nebraska was once a treeless plain. In addition, Morton's actions were the catalyst by which the Arbor Day holiday was established.

Arbor Day, an annual holiday on which trees are honored, was celebrated this year in Texas on April 29. In honor of this holiday, CECA donated more than 1,000 trees to 23 fourth-grade classes within its service district.

These trees, packaged in workshops that employ adults with disabilities through the Free Trees and Plants project, were distributed in an effort to inform children and their families about environmental concerns and the importance of energy efficiency. Fourth graders receiving trees were from the following schools: Nancy Smith Elementary in Albany; Moran Elementary; Baird Elementary; Cross Plains Elementary; J.B. Stephens Elementary in Bangs; Blanket Elementary; Early Elementary; May Elementary; Zephyr Elementary; South Elementary in Breckenridge; Cisco Elementary; Siebert Elementary in Eastland; Maxfield Elementary in Gorman; Ranger Elementary; Rising Star Elementary; Comanche Middle School; De Leon Elementary; Gustine Elementary; Sidney Elementary; New Horizons Elementary in Goldthwaite; Priddy Elementary; and Ann Whitney Elementary in Hamilton. The 1,085 students in these schools rolled up their sleeves and not only planted their trees, but also became Fourth Grade Foresters of Texas. Each student received an individually packaged 12- to 18-inch evergreen tree seedling sealed in a polybag by workers with disabilities through Fourth Grade Foresters USA. Each package included information about Texas' Arbor Day, planting and care instructions and energyefficiency and rebate information provided by CECA.

In a speech he gave more than 100 years ago, Morton was quoted as saying, "Arbor Day is not like other holidays. They repose upon the past, while Arbor Day proposes for the future."

It is still true today that the reason we celebrate all holidays is based on past events or to remember people who lived in the past. They are days to look back on and remember. Arbor Day, on the other hand, asks us to look to the future, the near future and the far future. It reminds us that every day we have to take care of our Earth not only for ourselves, but also for the people who will be born long after us.

"Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has," Margaret Mead was known to say.

It is the hope of CECA that this young group of students and their families will become the committed citizens of which Mead spoke.



Students from Cross Plains Elementary began their program by watching a Google film clip titled "Planting Bare Root Trees." Teachers then instructed students how to use the length of their arms from the elbow to the end of the hand, about a foot, to measure their hole. After being assigned partners and placing their trees in a bucket of water to soak, the students loaded up on the school bus for an outing to the Randy Walker Ranch. Once there, partners took turns digging, retrieving water in buckets and planting the trees at



sites Walker staked. Walker, whose home burned in the 2007 fire at Cross Plains, was 'tickled pink' with his new trees. He also commented on the students' enthusiasm, cooperation and respectful behavior while on his property. Teacher Melissa Richards said: 'Before and since Earth Day, our class has learned numerous ways that they can make a difference and help our planet, and thanks to CECA and the Fourth Grade Foresters, this project taught our students more than just how to plant a tree.'



Comanche Middle School students learned the history behind Arbor Day while student speakers read the Arbor Day Proclamation. After watching a short video clip about the importance of trees, all students were awarded a free pine seedling donated by **CECA**. They were then taught how to plant their tree in a container or in the ground.



Mrs. Johnson's class from Gustine Elementary kicked off the week by learning the history of Arbor Day and researching the many reasons why trees are of such importance. The class was surprised to discover that more than 5,000 products are made from trees. They



collectively made a list of the products and byproducts that come from trees. Using the words from the list, they created a picture of a tree using only the text. The class wrapped up the program by planting five trees on the school campus.