

Cumberland Electric Membership Corporation

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Todd Hesson,
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CEMC Board of Directors

Tommy G. Whittaker,
Sumner Co., President

Wesley H. Aymett,
Cheatham Co., Vice President

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At Large, Secretary-Treasurer

K. Jean Beauchamp, Robertson Co.,
Assistant Secretary-Treasurer

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Charles R. Hancock, Stewart Co.

Michael A. Mason, Robertson Co.

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Edward L. Oliver, Montgomery Co.

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Mission Statement

Cumberland Electric Membership Corporation is committed to providing dependable, affordable electric service through the expertise and dedication of competent leadership and a well-trained and responsive workforce.

AS I SEE IT *Manager's Viewpoint*

Cooperatives drive democracy

It has often been said that those who cannot remember the past are condemned to repeat it. It's easy to take our right to vote for granted — maybe because there are so many opportunities to exercise that right. There are national, state and local elections for political offices. Then there are elections for social or other civic organizations. If you own stock, you are asked to vote in those elections. So it is understandable to see how “election fatigue” can take hold.

As we head into the final stage of what has been a divisive national election, it is a good time to remember that elections don't have to be about name-calling and bitterness. Co-ops can and do play a role in cultivating a civil society where people can practice democracy at the hyperlocal level. As a member of Cumberland Electric Membership Corporation, you have the right to run for the board of directors. Even if you choose not to have that

level of participation, you should feel empowered to reach out to current board members and candidates.

The beauty of belonging to a co-op is that every member has a voice, but you must use that voice if you want to be heard on the issues that matter to you. In the document “A Blueprint for a Cooperative Decade,” the International Cooperative Alliance, a global organization made up of co-ops from more than 100 countries, identified member participation as one of the five key ingredients for a co-op to be successful.

Voting and being actively involved in the affairs of the co-op are key ways in which members can participate. Take the time to get to know candidates running for CEMC's board. Seek out ways that you can help spread the word about the good work your co-op is doing.

Let your voice be heard, and take the time to participate in all the elections.



*Jim Coode,
General Manager,
Cumberland
Electric Membership
Corporation*

Energy Efficiency Tip of the Month



An average household dedicates about 5 percent of its energy budget to lighting. Switching to energy-efficient lighting is one of the fastest ways to cut your energy bills. By replacing your home's five most frequently used light fixtures or bulbs with models that have earned the ENERGY STAR rating, you can save \$75 each year.

Source: energy.gov

Community food drive



Sango Elementary students are eager to show off the food they collected during the 2015 food drive.

Cumberland Electric Membership Corporation's annual community food drive is coming soon to an elementary school near you!

During the month of October, CEMC will partner with local schools throughout our service area to collect nonperishable food items for those in need in our community. All items collected will be donated to local food banks for distribution.

"The food drive is our way of demonstrating the cooperative principle 'Concern for Community,'" says CEMC Community Relations Coordinator Stephanie Lobdell. "Each year, our students and their families bring in thousands of food items, and we're confident this year will be no exception."

If you would like to help, please consider picking up an extra one (or more) of the following suggested

items as you're doing your grocery shopping over the next couple of weeks:

- Peanut butter
- Canned meat (chicken or tuna)
- Canned vegetables
- Canned fruits
- Dry pasta
- Pasta sauce
- Rice
- Dried beans
- Canned chili or soup
- Bottled drinks (juice, water, sports drinks, etc.)

Individual schools will coordinate the details for their respective food drives, so please be sure to check with your child's school for specific collection dates and additional information.



Project Help: neighbors helping neighbors

Cumberland Electric Membership Corporation, in cooperation with local energy assistance agencies, offers a program in which members who choose to participate can donate \$1 or more each month to help provide some relief to individuals who are struggling to pay their utility bills.

The program, Project Help, allows members to pay an additional \$1 on their electric bills each month to help pay the utility bills of the elderly, disabled and/or those who are not economically self-sufficient. Project Help is a voluntary program. All money collected from Project Help goes to energy assistance agencies in our communities, which determine how these special funds are distributed. Here's how the Project Help Program works:

Who is eligible to receive Project Help funds?

To qualify, Project Help recipients must contact their local energy assistance agencies. They will be required to provide proof that they are unable to bear the cost of heating their homes and that they do not exceed the annual income limit established for the assistance program.

How are the funds administered?

When CEMC receives your Project Help donation, 100 percent of the money goes directly to the assistance agency that administers the program in your county. The

agency distributes the assistance based on qualifying needs.

Who contributes to Project Help?

Everyone can contribute to CEMC's Project Help program. The minimum donation is \$1 per month.

How long do I donate to Project Help?

You are billed each month on your CEMC statement for the amount you wish to donate. You will continue to be billed each month until you notify CEMC that you would like to discontinue your donations.

How will I know I am donating each month?

You will see a separate line on your CEMC statement to show your Project Help donation.

How do I sign up?

If you would like to donate \$1 or more each month to Project Help, you can do so by marking the box on your bill stub and completing the Project Help section on the back of your bill. Or contact CEMC's Customer Service Department either by phone at 800-987-2362 or live chat on our website, www.cemc.org.

By donating to Project Help, you can make a difference for someone in need this winter. Please consider joining us in warming the homes of our neighbors by contributing to Project Help. A dollar a month can truly make a difference.



**UTILITY POLES
ARE NOT
BULLETIN BOARDS**

Think before you post that sign!
Staples, nails and tacks used to hang signs and fliers create dangerous obstacles for electric lineworkers.
Their jobs are dangerous enough – help us keep them safe!

CEMC
Cumberland Electric
Membership Corporation
Your Touchstone Energy® Cooperative
The power of human connections

The world turns more energy-efficient

Efficiency trends are expected to continue for decades

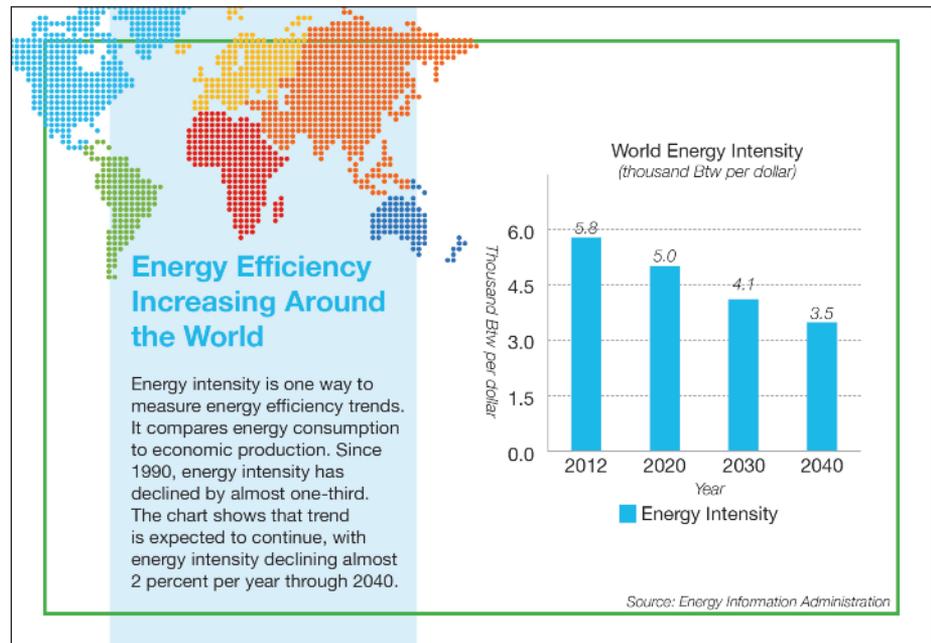
By Paul Wesslund

People aren't just talking about energy efficiency. It's actually happening across the globe — and there is a way to measure it.

It's called energy intensity and is calculated by comparing energy consumption to the measure of a country's economic production — its Gross Domestic Product. In other words, energy intensity measures how much energy it takes to produce a dollar of economic activity.

In the past 25 years, energy intensity worldwide has dropped by one-third, says the U.S. Department of Energy's Energy

Information Administration (EIA). There can be a lot of reasons for a decline in energy intensity: more efficient lighting options, energy use habits, standards for vehicle fuel economy and building codes and economies based more on services and less on industrial production.



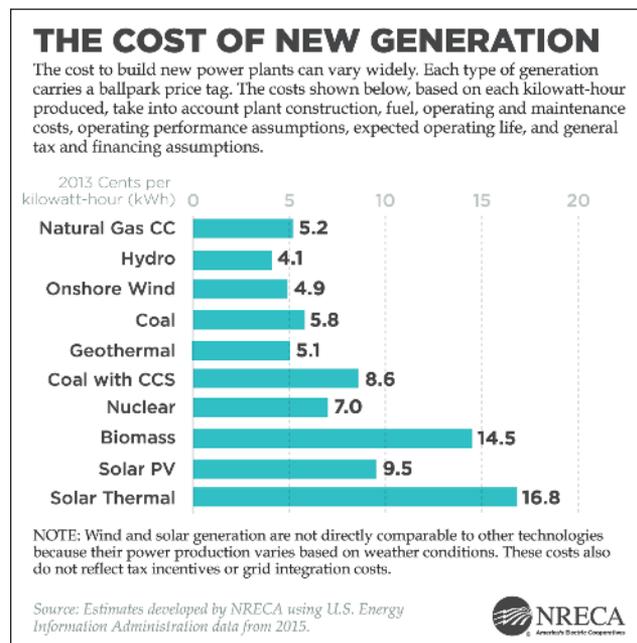
“Energy intensity has decreased in nearly all regions of the world,” says EIA, “with reductions in energy intensity occurring both in the more developed economies ... and in the emerging nations.”

EIA predicts that energy efficiency will continue to improve. The agency's International Energy Outlook 2016 forecasts that over the next 28 years studied in the report, world energy intensity will decline almost 2 percent a year, from 5.8 thousand British Thermal Units of energy for each dollar of Gross Domestic Product in 2012 to 3.5 by 2040.

According to EIA, more economically developed countries tend to have lower energy intensities because they “have transitioned from relying on energy-intensive manufacturing to using more services-based economic activities, which are less energy-intensive.”

EIA says that in 2015, developed economies used 12 percent less energy per dollar than developing countries.

Paul Wesslund writes on cooperative issues for the National Rural Electric Cooperative Association, the Arlington, Va.-based service arm of the nation's 900-plus consumer-owned, not-for-profit electric cooperatives.



Making the most of home upgrades

By Joseph Woodard, CEMC Energy Programs Inspector

Extreme climates = extreme energy use

After enduring another scorching Tennessee summer, you may have noticed that keeping your home comfortable has been difficult in the extreme temperatures. Maybe that heat pump seems to run constantly or your home just never seems quite comfortable. If you've noticed this along with your energy costs rising annually in the heating or cooling seasons, it may be that your home is no longer performing to its full potential and is consuming more energy in the process.

Energy answers ... outside the home?

I'm sure that like many homeowners, you avoid entering your crawlspace or attic as much as possible. That's understandable as these areas are dark and extremely hot or cold. However, a short visit could lead to the discovery of major issues that could affect your home's energy consumption.

Keeping out the cold

For any Tennessee residents who are enthralled by a certain cable television series involving dragons, knights and metal thrones, the phrase, "Winter is coming," is not lost. As we prepare for the chill in the air, it is important to recognize that your home's best chance of keeping warm is to stop the cold air from entering. Sealing the home's thermal envelope is the most effective way to combat thermal loss as it is common to find areas like Figure 1 (below) that allow the inside air to freely escape to the outside.



Figure 1: Plumbing and wiring penetrations within the crawlspace and attic are common air sealing opportunities.



Figure 2: All joints within a duct system should be sealed with mastic sealant; duct tape and caulk are not suitable sealants. Check the labeling. Ducts should be insulated to R-8 or more.

Getting the heat to the inside

OK, so you've stopped the cold from entering the home. What about the heat you're trying to keep in? The majority of heating, ventilation and air-conditioning (HVAC) systems in Middle Tennessee are forced-air systems, utilizing ductwork to move conditioned air into homes. Unfortunately, most duct systems are leaky, and poorly insulated, even when they're brand-new. Just as a leak in plumbing allows water to escape, a leaking duct system like in Figure 2 (above) allows that conditioned air to enter your crawlspace or attic, losing any efficiency your HVAC system can create.

Proper install gives expected savings

Maybe you've made some upgrades already; your effort is applauded! However, any upgrade to your home is only as valuable as the quality of the installation. If you've upgraded that water heater to an efficient model but the plumbing to that appliance leaks, the result is energy-saving features not utilized because the unit must compensate for shortcuts made during installation.

Energy Resource Center

If you're not ready to jump into your crawlspace, Cumberland Electric Membership Corporation offers some tools to help diagnose common deficiencies in your home. Visit www.cemc.org to view our Energy Resource Center, which includes our energy adviser-led self audit. By

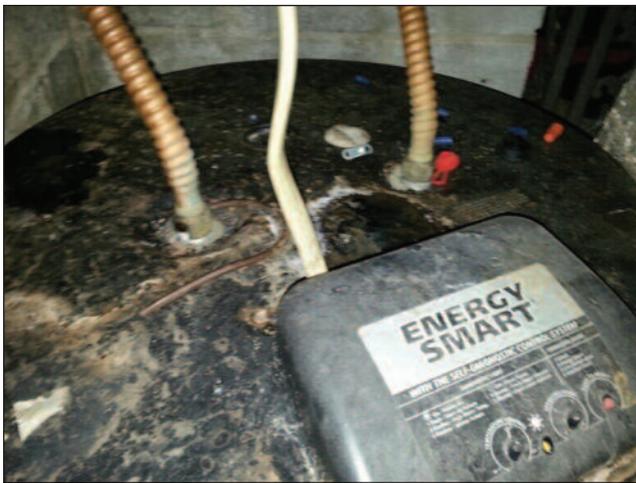


Figure 3: Rust and calcium deposits on a water heater are obvious indicators of a leak. Any efficiency of the tank is wasted if it is constantly being refilled and reheated.

entering your home’s data, you’ll receive a comprehensive report of how your energy dollars are spent now and suggested areas to upgrade to help you plan for the future.

eScore Residential Efficiency Program

If you’ve decided it’s time to start upgrading your home to lower your operating costs, CEMC is excited to offer homeowners an easy way to make your home as energy-efficient as possible. The eScore Program uses a clear evaluation of your home to discover which upgrades can yield the quickest improvement in your specific home. Learn your home’s eScore, get expert advice, install efficiency upgrades and receive rebates and financing for the work you’ve had done.

Bonus: Visit www.2escore.com to complete the self audit for your home, and you’ll receive a *free* Home Energy Savings Kit including a \$10 Home Depot gift card!

Saving energy dollars one step at a time

While upgrading an existing home can be a long-term series of projects, the eScore program allows you, as the homeowner, to complete these goals on your own schedule and revisit the program at any time. If you are upgrading your HVAC system and adding attic insulation this year but plan to replace windows the next, you can easily re-engage at that time to receive the rebates you have earned for your efficiency investments.

Affordable financing available

Did you know that CEMC offers low-interest financing for upgrades to your home? By opting for eScore financing, the cost of upgrades can be spread into equal payments added to your monthly electric billing. Upgrades such as heat pumps, duct systems, attic insulation and air sealing can be financed to help you achieve the savings at a budget-friendly cost. For more details or to apply, visit www.cemc.org/services.

Rebates for quality installs

On top of energy savings gained over the life of the home, rebates are awarded for having the energy-saving measures installed using the Quality Contractor Network (QCN). As the quality of installation maximizes the full benefit of the energy savings you are wishing to achieve, utilizing a QCN contractor ensures that the install is

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Upgrade	Homeowner Rebate (Matching 50%)	Limitations
Attic insulation	\$250/home	One time only
Air sealing	\$200/home	One time only
Duct systems	\$200/system	One time per system
Heat pump water heaters	\$200/unit	No limit
Window replacement	\$25/window	\$500 max per home
Storm windows added to single-pane windows	\$12.50/window	\$250 max per home
Exterior door replacement	\$50/door	\$300 max per home
Heat pumps — ducted or nonducted	\$250/unit	No limit
Tune-up (existing HVAC)	\$15/unit	One rebate per unit per year
Central air conditioners	\$150/unit	No limit
Geothermal heat pumps	\$500/unit	No limit
Dual-fuel heat pumps	\$250/unit	No limit

Making the most of home upgrades

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performed to the Tennessee Valley Authority's standards; a third-party inspection verifies that your investment is worry-free.

How to get started

Simply visit www.2eScore.com or call 1-855-2eScore (1-855-237-2673) to begin. After registering, choose a QCN member to receive free estimates and get started with the upgrades you've planned. Once the install is complete,

you will receive a FREE eScore evaluation of the home **and** a quality-assurance inspection of the work. A certified energy adviser will visit and evaluate the home to provide a customized list of suggested future upgrades and install instant-savings measures (compact fluorescent lightbulbs and low-flow showerheads).

If you're unsure of where to start your upgrades, you can have an eScore evaluation performed on your home before making upgrades for a nonrefundable fee of \$75. Sign up for an eScore evaluation by visiting www.2eScore.com or calling 1-855-2eScore (1-855-237-2673).

Don't be fooled by common energy myths

By Abby Berry, National Rural Electric Cooperative Association

Eating carrots will greatly improve your eyesight; cracking your knuckles leads to arthritis; watching too much TV will harm your vision. We've all heard the old wives' tales, but did you know there are also many misconceptions about home energy use? Don't be fooled by common energy myths.

Myth: The higher the thermostat setting, the faster the home will heat (or cool).

Many people think that walking into a chilly room and raising the thermostat to 85 degrees will heat the room more quickly. This is not true.

Thermostats direct a home's heating, ventilation and air conditioning system to heat or cool to a certain temperature. Drastically adjusting the thermostat setting will not make a difference in how quickly you feel warmer. The same is true for cooling. The Department of Energy recommends setting your thermostat to 78 degrees during summer months and 68 degrees in the winter.

Myth: Opening the oven door to check on a dish doesn't really waste energy.

While it can be tempting to check the progress of that dish you're cooking in the oven, opening the oven door does waste energy. Every time the oven door is opened,

the temperature inside is reduced by as much as 25 degrees, delaying the progress of your dish and, more importantly, costing you additional money. If you need to check your food, try using the oven light instead.

Myth: Ceiling fans keep your home cool while you're away.

Believe it or not, many people think this is true. Ceiling fans cool people, not rooms. The fans circulate room air but do not change the temperature. A running ceiling fan in an empty room is only adding to your electric bill. Remember to turn fans off when you're away and reduce your energy use.

Myth: Reducing my energy use is too expensive.

Many consumers believe that reducing energy use requires expensive up-front costs like purchasing new, more efficient appliances or construction upgrades to an older home. But the truth is, consumers who make small changes to their energy-efficiency habits such as turning off lights when not in use, sealing air leaks and using programmable thermostats can see a reduction in energy consumption.

Remember, energy efficiency doesn't have to be difficult. Focus on small changes to save big. Learn more about ways to save energy by visiting www.cemc.org or calling 800-987-2362.

