

Norris Electric *News*

Your Touchstone Energy® Partner 



Attention High School Seniors

Norris Electric Cooperative's Board of Directors has increased the amount of three scholarships to be awarded in 2014. Next year each scholarship will be in the amount of \$1,000. All high school seniors whose parents are members of Norris Electric and are currently receiving power from Norris Electric are encouraged to apply for a scholarship.

Requirements for application:

1. Must be a high school senior

2. Must begin college within a year of notification
3. Must be a full time (12 hours) student

Scholarship awarded based on:

1. Grade point average
2. College entrance test scores
3. Work & volunteer experience
4. School & community activities
5. Knowledge of electric cooperatives
6. Biographical essay

Deadline for application submission is Feb. 1, 2014.

For more information, call Norris Electric at 877-783-8765 or contact your high school guidance department. All necessary paperwork is available for download at the cooperatives website at www.norriselectric.com.

Office Closing: Monday, September 2 for Labor Day

Norris Electric Cooperative • 8543 N. State Highway 130 • Newton, Illinois 62448 • 618-783-8765
Office hours: Monday — Thursday 7:00 a.m. — 5:00 p.m

Harvesting Efficiency

Energy efficiency offers rich rewards for farmers

By Megan McKay-Noe, CCC

Every dairy cow carries an energy price tag. Farmers pump water—and \$2.6 billion in energy dollars—to boost crops.

At the end of the day, energy, both direct and indirect, accounts for 13 percent of the average farmer's production expenses. To enhance their bottom lines, more farmers are turning to energy efficiency.

Electricity powers a farm's heating (water, space, heat lamps), pumping (irrigation, water wells, manure lagoons), refrigeration, ventilation, lighting, and fans (drying grains, aeration). Material handling—such as feed augers, manure conveyors, milking, and egg conveyors—also drain resources.

The American Council for an Energy Efficient Economy estimates farmers could save \$88 million annually by investing in efficient motors and lighting. How can Illinois farmers reap efficiency benefits?

EnSave, a national agricultural energy efficiency firm, provides a pyramid of steps farmers can take to cut down energy use. The greatest savings come from deploying more efficient equipment, although behavioral changes and a simple analysis of how energy is consumed can result in significant savings, too.

Equipped to save

Each farm—dairy, poultry, beef, hog, or crop—offers opportunities for efficiency improvements. For example:

- **Clean equipment:** Removing dust, soot, and debris from equipment will allow it to do more work with less effort, extending its life and reducing energy use.
- **Inspect regularly:** Equipment should be checked regularly. Replace parts that are showing excessive wear before they break and cause irreparable damage.

- **Plug leaks:** Be it a pinprick hole in a hose or a drafty barn, leaks waste money, fuel, and electricity.
- **Remove clutter:** Hoses should be regularly flushed to clear debris. Ensure fan and motor intakes and exhausts remain clutter-free for maximum circulation and efficiency.

Light lessons

After tuning up equipment, check lights. Light work areas, not entire buildings. Use daylight when possible. Install dimmable ballasts to control light levels.

The type of light used makes a difference. Although useful as a heat source in limited situations (to keep water pumps from freezing in winter, for example), incandescent lightbulbs only convert 10 percent of the energy used into light. The rest of the energy is given off as heat. Consider these energy-saving lighting options, as compared to incandescents:

- **Halogen incandescents** use 25 percent less energy and last three times longer than traditional

incandescent bulbs

- **Compact fluorescent lamps (CFLs)** use 75 percent less energy and last up to 10 times longer
- **LEDs** use between 75 percent and 80 percent less energy and last up to 25 times longer
- **Cold cathode fluorescent lamps (CCFLs)** last up to 25 times longer and offer the same efficiency as CFLs.
- **T-8 and T-5 fluorescent lights** with electronic ballasts generate less noise and produce more light per watt. These bulbs also offer better color rendering, minimal flickering, cooler operation, and energy savings.

Harsh surroundings

Farm equipment must survive in a rough environment. Before buying new equipment or lighting, make sure the gear can survive fluctuating temperatures, wet locations, long hours of operation, and large loads.

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Confirm the manufacturer's specifications that the unit is intended for the environment, and review the warranty and conditions. Make sure the way you plan to use it will not void the warranty.

Look for knowledgeable suppliers and installers familiar with the local climate and your farm's needs. Typically, farms need more rugged devices than what's available at a low cost from a retail or big-box store.

Seeds of change

For regional or crop-specific efficiency methods, use the U.S. Natural Resources Conservation Service energy calculators, energytools.sc.egov.usda.gov. Assess how much energy a farm needs for animal housing, irrigation, and tillage and discover ways to cut costs. Dairy farmers may also visit www.usdairy.com/saveenergy.

Funding for efficiency upgrades is available through the Rural Energy for America Program (REAP). Since 2008, REAP has funded more than 6,800 renewable energy and energy efficiency grants and loan guarantees as well as 600 farm energy audits. Get details at www.rurdev.usda.gov > Energy > Rural Energy for America Program.

Farmers can also apply for financial and technical help through the Environmental Quality Incentives Program (EQIP), a program from USDA's Natural Resources Conservation Service. EQIP supports energy initiatives to manage and reduce agricultural energy needs. Learn more at www.nrcs.usda.gov > Programs > Financial Assistance > Environmental Quality Incentives Program.

Sources: American Council for an Energy Efficient Economy, EnSave, U.S. Natural Resources Conservation Service, Innovation Center for U.S. Dairy

Co-op Lighting Lessons

2014 brings brighter efficiency standards and savings

By Amber Bentley

As federal efficiency standards phase out traditional incandescent lightbulbs, electric co-ops are testing which lighting technologies work best for consumers. Co-ops like Norris Electric have long championed compact fluorescent lamps (CFLs), the first cost-effective, energy-saving alternative to traditional bulbs.

By 2014, household lightbulbs using between 40-W to 100-W will need to consume at least 28 percent less energy than traditional incandescents. Because incandescents use 90 percent of their energy producing heat, upgrading saves Americans an estimated \$6 billion to \$10 billion in lighting costs every year.

More lighting changes will roll out in coming years. The federal Energy Independence and Security Act of 2007 requires that lightbulbs become 70 percent more efficient than classic bulbs by 2020 (LEDs already exceed this goal.)

Lighting accounts for roughly 13 percent of an average household's electric bill. Hardware store shelves are filled with lightbulb options. What works best for co-op members?

Electric co-ops teamed up on lightbulb testing with the Cooperative Research Network (CRN), the research and development arm of the National Rural Electric Cooperative Association, an Arlington, Va.-based service arm of the nation's 900-plus consumer-owned, not-for-profit electric cooperatives.

"We found most residential consumers still prefer to use CFLs over more expensive, but more energy efficient, LEDs [light-emitting diodes]," remarks Brian Sloboda,



CRN senior program manager specializing in energy efficiency. "The price of LEDs for home use has substantially dropped, so we may begin to see more LEDs as it becomes more economically feasible to buy them."

A helpful addition to lighting products is the Lighting Facts Label. Much like nutrition labels found on the back of food packages, this version shows a bulb's brightness, appearance, life span, and estimated yearly cost. The Lighting Facts Label was created by the U.S. Department of Energy (DOE) to help consumers understand the product and buy the most efficient lightbulb.

Consumers' energy-efficient lighting options include:

- **Halogen incandescents:** Use 25 percent less energy, last three times longer than regular incandescent bulbs
- **CFLs:** Use 75 percent less energy, last up to 10 times longer
- **LEDs:** Use between 75 percent and 80 percent less energy, last up to 25 times longer

Federal lightbulb standards have the potential to save consumers billions of dollars each year. For an

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"Co-op Lighting" continued from 16c

average American house with about 40 light fixtures, changing just 15 bulbs can save about \$50 a year per household, according to DOE.

A word of warning when purchasing new types of bulbs: You generally get what you pay for.

"Some manufacturers exaggerate claims of energy savings and lifespans, and cheaper models probably won't last as long as higher-quality bulbs," Sloboda cautions. "If you look for the ENERGY STAR label, that means the bulb exceeds minimum efficiency standards as tested by the federal government."

The best way to benefit from this fast-changing technology is to purchase a more energy efficient lightbulb the next time one goes out, Sloboda concludes.

To learn about lighting options, visit energysavers.gov/lighting. For shopping tips visit ftc.gov/lightbulbs.

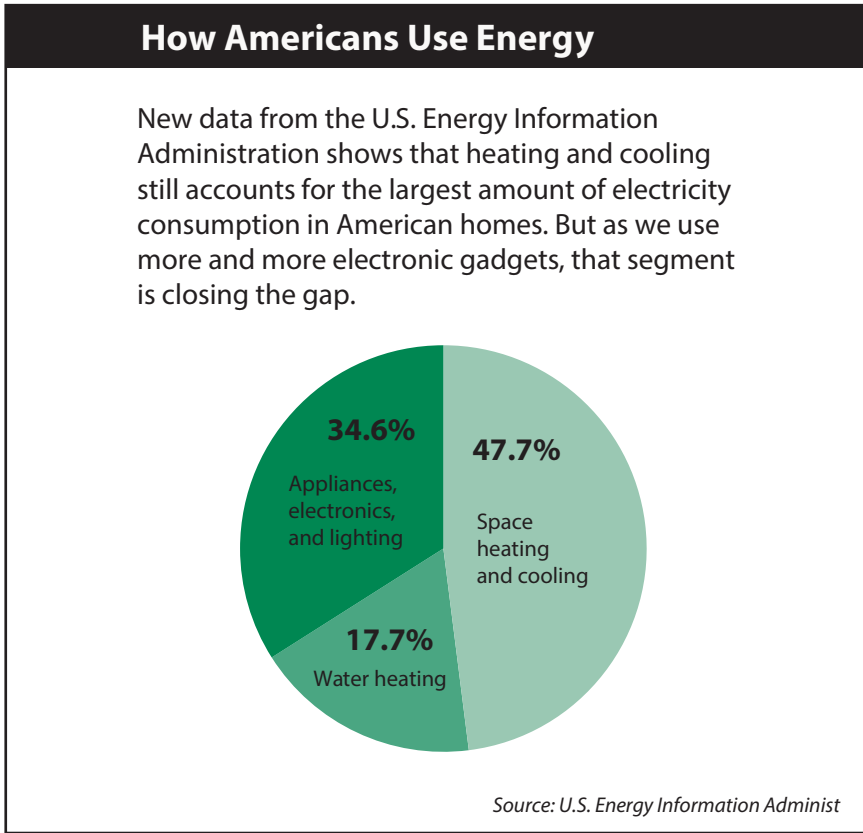
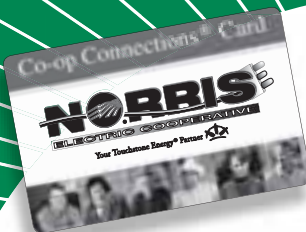
Sources: Cooperative Research Network, U.S. Department of Energy Amber Bentley writes on consumer and cooperative affairs for Touchstone Energy® Cooperatives, the national branding campaign for more than 740 electric cooperatives across the country.

Vegetation Control Schedule

We will have crews performing routine tree trimming or spraying during September in the following areas:

**Richland County
Effingham County
Cumberland County
Lawrence County
Clark County**

These areas have been scheduled quite a bit in advance so our plans may change. You should call us if you have any questions relating to a specific area or our vegetation management policies and practices. You may also call us if you wish to make other arrangements for your specific property or to question our vegetation control practices. Our Forestry Department can be reached at 1-877-783-8765 or 618-783-8765 during working hours. Our website is www.norriselectric.com.

Co-op Connections® Card Saving Members \$\$\$

Norris Electric Cooperative members saved 28.9% on prescriptions in June 2013 using their Co-Op Connections card. 103 prescriptions were filled for a total savings of \$1,755.