



# SHINING LIGHT ON ENERGY SAVINGS



Your Touchstone Energy® Partner



# With LEDs, the future of bulbs is bright

When it comes to lighting, the potential for energy efficiency is just too great to ignore. Around the home, changing bulbs can change your electric bills, and the monthly savings can add up quickly.

"Lighting efficiency upgrades have long been the poster child of energy efficiency," said Alan Shedd, director of energy solutions for Touchstone Energy Cooperatives.

That's because consumers regularly use dozens of bulbs in fixtures out of necessity and convenience. According to the U.S. Department of Energy's Energy Information Administration, nearly 130 billion kilowatt hours of electricity are consumed by residential lighting each year, representing about 9 percent of all home energy use.

As light emitting diode (LED) design options increase, prices are coming down, and more consumers see LEDs as an alternative to carbon filament incandescent bulbs first popularized by Thomas Edison in the 1880s.

"The economics make sense," said Shedd. "When LED lamp products were \$20, it was a tough sell. Now for a couple of bucks you can get a lamp that saves energy and lasts 10 times longer."

To get an idea of your potential for energy savings, complete a home inventory. Don't just count fixtures—count bulbs, checking wattage, and whether they are dimmable, three-way, or require

special bases. Also note the type of bulb now in use: incandescent, halogen, compact florescent lights, or straight or circular florescent tubes.

There's a good chance your total bulb count for the average single-family home will be between 50 and 75, including hallways, garages, and storage areas.

**Savings Add Up** In 2009, 58 percent of U.S. households had at least one energy-efficient bulb indoors. By spring 2016, 86 percent of all households used at least one CFL or LED bulb, and nearly

20 percent of all households had completely abandoned incandescent bulb use.

Since passage of the Energy Independence Act of 2007, electric cooperatives and public power districts, including Taylor Electric Cooperative, have promoted energy efficiency in lighting by sharing information on potential savings.

The federal law mandating a 25 percent increase in lighting efficiency led many U.S. manufacturers to phase out incandescent bulbs of 100 watts or more.

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## **Shining Light on LED Savings**

LED lights last up to 30 times longer than incandescents, reducing the need to replace bulbs in high or hard-to-reach places. Where can you use LEDs?

#### Living Room Lamps

Table or floor three-way lamps using LED bulbs provide 620, 1,600 or 2,150 lumens of soft white light and deliver up to 25,000 hours of light.

#### Kitchen

Dimmable recessed LED conversion lights add a warm glow of up to 1,200 lumens for kitchen workspaces and add far less heat. Each bulb could last 10 years.

#### Bedrooms and Hallways

Long-life LEDs are ideal for ceiling fixtures. A 9-watt LED produces the same 800 lumens of light as a 60-watt incandescent, and uses about 80 percent less energy.

#### Bathrooms

Omnidirectional LED globe bulbs provide a warm glow ideal for bathrooms. A 6-watt bulb produces 450 lumens and lasts up to 15,000 hours.

#### Outdoors

A 6-watt, 500 lumen LED bulb can replace a 40-watt incandescent bulb. The LEDs last up to 30,000 hours, so it could be a one-time switch.



Please visit Taylor Electric Cooperative's website at www.taylorelectric. org for a complete list of member names and address identified as having unclaimed property with the cooperative. You may claim these funds by contacting the cooperative and furnishing proof of your legal interest in such funds on or before August 31, 2018. If you have any questions, please contact our office at 715-678-2411 or 800-862-2407.

# CONGRATULATIONS 2018 scholarship winners

Students on this page each received a Taylor Electric Cooperative \$500 Scholarship. Students on the facing page each received a Taylor Electric Board of Directors \$200 Scholarship.



Courtney Block is the daughter of Rick and Karen Block, Medford. Courtney plans to attend the University of Wisconsin-Marathon County in the fall and will major in elementary education. She intends to transfer to the University of Wisconsin-Stevens Point to complete her degree. She enjoys spending time with her family as well as fishing, swimming, and watching softball games with her dog.

Adam Dums is the son of Andrew and Karen Dums, Rib Lake. Adam is planning to attend Michigan Technological University and will major in mechanical engineering. His interests and hobbies include playing trumpet, running, and solving Rubik's cubes.





Selena Birkholz is the daughter of Gerald and Nicole Birkholz, Medford. She will be attending the University of Wisconsin-Green Bay in the fall and will major in mathematics. Her interests and hobbies include reading, math, science, playing saxophone, and spending time with family and friends.



Brandon Seefeld is the son of Adam and Laurel Pitzke and Robert Seefeld, Medford. He will be attending Northcentral Technical College in the fall and is enrolled in the Agricultural Equipment Program. Brandon spends most of his time working at Pitzke Farms. In his free time he enjoys hunting, fishing, four-wheeling, and camping.

Kierra Krause is the daughter of Jeff and Heidi Krause, Medford. She will be attending the University of Wisconsin-Eau Claire and will major in information systems. Her interests/hobbies include gymnastics, hunting, fishing, paddle boarding, and kayaking.





Hailie Seubert is the daughter of Steven and Kristi Seubert, Dorchester. Hailie will be attending Northcentral Technical College to pursue a career in nursing and specializing in psych nursing.



Kayla Rausch is the daughter of Anthony and Susan Rausch, Medford. She is planning to attend Northcentral Technical College and will study radiography. Kayla is interested in the wonders of the human body and how it works as well as anything science-related. She enjoys being outside with her family

and friends, playing the flute, kayaking, and painting.

Katlyne Henrichs is the daughter of Doug and Chris Henrichs, Medford. She will be attending the University of Wisconsin-River Falls in the fall and will major in the Veterinary Technician Program. Her interests and hobbies include agriculture, hunting, snowmobiling, and being outdoors and with animals.





Lainey Brunner is the daughter of Jesse and Candy Brunner, Medford. She will be attending the University of Wisconsin-Eau Claire and will major in either early childhood education or speech pathology. Her interests and hobbies include volleyball, basketball, track, singing, drawing, and swimming.

Jacylyn Gajewski is the daughter of Shari and Michael Gajewski, Medford. She will be attending Northcentral Technical College for early childhood education and will transfer to a university to receive her bachelor's degree. She enjoys reading and playing basketball. She also enjoys going to her family's cabin.



Sam Hallgren is the son of Brent and Juleen Hallgren, Medford. He is planning to attend Michigan Technological University, Houghton, and will major in mechanical engineering. His hobbies include playing and watching soccer. Sam is a big Liverpool fan and admits to waking up at 6:30 a.m. on a few Saturdays just to watch



them. He enjoys travelling and went to Europe last year with the MASH History Club.



Brecca Miller is the daughter of Tina Miller and the late Tony Miller, Medford.
Brecca will be attending the University of Wisconsin-Madison in the fall and will major in biology with an emphasis on pre-med. She would like to become an OB/GYN and return to Medford to practice.

Alicia Viken is the daughter of Duane and the late Jean Viken, Dorchester. She will be attending Northcentral Technical College in the fall and will study agri-business and dairy science. Farming is her life and she loves milking cows. Alicia's interests are farming, cattle, and the dairy industry. Her hobbies include milking cows and being outside by her heifer and steer.





Bryanne Brugger is the daughter of Michael and Susan Brugger of Rib Lake. Bryanne is attending University of Wisconsin-River Falls majoring in agricultural marketing with a minor in Spanish. Bryanne's interests are working with dairy cattle, track and field, and spending time with friends and family.



## **LEDs** (Continued from page 15)

Halogen varieties available for residential applications can produce excessive heat. That becomes more of a consideration during cooling season, when HVAC systems can get their most use.

In recent years, manufacturers have focused more research on lighting efficacy, energy efficiency, and cycle longevity. That's led to major increases in the projected hours of use and lower failure rates.

Many consumers don't like the lighting quality offered by compact florescent light bulbs, which can also be prone to failure due to heat build-up when used in closed lighting fixtures.

While LED lighting was initially expensive and limited to warm white or a few color temperatures and designs, market acceptance and continued research have forced prices down, and led to an expanded variety of products.

**Lumens Not Watts** Cashing in on lighting efficiency can get easier if we rethink the way we buy and use the lighting products.

Many consumers resist switching from ounces to grams, miles to kilometers, or Fahrenheit to Celsius when discussing measurements and temperatures. But, when it comes to lighting, thinking lumens instead of watts makes sense, because it could save you dollars and cents.

Cool white, soft white, dimmable decorative, three-way decorative, and color are now among the options, with LEDs taking up an increasing share of shelf space in the lighting sections of hardware, discount and home improvement stores.

"The wide range of products is the biggest challenge—used to be a lamp was a lamp—you pretty much knew what you were getting," said Shedd. "Now, the shelves are packed with a dizzying array of choices."

According to Shedd, education, or re-education, is the key. Once a consumer knows that lumens are a measurement of the amount of light given off by a bulb, they understand that the lower the lumens, the dimmer the light.

"Sure lumens can be confusing—we didn't grow up with that," said Shedd. But showing that a 1,000-lumen lamp is equivalent to a 60-Watt incandescent bulb is a short term fix."

While replacing compact florescent light bulbs with LEDs saves less energy, consumer preferences have driven a shift away from CFLs, in part because of color and lighting quality.

"The energy savings and life expectancy of an LED is incrementally better," said Shedd. "The early CFLs did not offer good color, they took a long time to reach full brightness, particularly in cold environments, and some failed prematurely, especially if they were used in enclosed fixtures."—Derrill Holly NRECA

# THE DOG DAYS OF SUMMER



We've hit the dog days of summer! Here are a few tips from the Energy Education Council for keeping your cooling system running efficiently during these hot summer days:

- Common problems leading to air conditioner malfunction often include faulty installation and inadequate maintenance. For this reason, always check to be sure that your equipment is being used in compliance with manufacturer instructions.
- While running your air conditioner, be sure that all windows and doors are
  closed to increase operating efficiency. Sealing ducts, increasing insulation, and
  plugging leaks in the home can also help improve the overall efficiency of the air
  conditioner. Exhaust and ceiling fans can increase the air flow in the home and
  reduce humidity in rooms that are often warmer, such as bathrooms and kitchens.
- Trim foliage at least two feet around the air conditioner. Clearing the area around the unit ensures that airflow to the appliance is not blocked.

And remember, we're still doing the Summer Shift: You can help keep TEC's wholesale power costs down by shifting some energy-consuming tasks to before 7 a.m. or after 11 a.m., when the cost of wholesale power is lower.

### Michael Schaefer, President/CEO

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website: www.taylorelectric.org **Lainie Kellnhofer, Editor** 

