



PRESS RELEASE

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EnergyWise™ Tip: Incandescent Christmas Light's Last Gleaming

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If you're still using incandescent Christmas lights for your holiday decorating, I assume you have your reasons. I have mine. For me, it's the nostalgia of Christmases past. So, when I considered switching to LED lights, I did some homework. For those still on the fence, I share some arguments and insight below.

First, I've heard the "stranded" investment rational. "I've got too much invested in all my lights!" and "If they're not broke, why would you pitch 'em?" These sound like two contentions I'm sure my grandpa would make if I could ask his opinion on upgrading to LEDs. Unfortunately, these perspectives don't account for operating and maintaining those lights into the future.

Truth be told, both incandescent and LED lights will eventually need replacement. Though some may boast their Christmas lights are decades old, most light strands fail long before reaching such an age. While traditional lights have ratings 3,000 hours of use or less, some LED Christmas lights boast a 50,000-hour lifetime.

Though light sets used indoors will last much longer than outdoor sets, don't expect anywhere close to 50,000 hours. According to Christmasdesigners.com, a company with more than 30 years of experience building and installing Christmas decorations and lighting, exterior LED and traditional incandescent light sets have about the same lifespan.

Professional and commercial grade sets will last six to seven years if stored away after Christmas. If left up throughout the year, they will only last 24 to 30 months. Average retail grade sets, which most homeowners

buy, will last about three years when taken out of storage and displayed only during the holiday season. If left up year-round, retail grade sets are fortunate to last six to 12 months.

I've heard cost per strand makes LEDs unaffordable. Let's do some simple math. Assume my Christmas lights operate 12 hours-per-day for 30 days of the season. That's a total of 360 hours-a-year. Currently, a 100-bulb strand of traditional incandescent mini-lights costs about \$3 and requires 40 watts of electricity, while a 100-bulb strand of LED mini-lights costs from \$6 to \$12 and only requires six watts. If electricity costs \$0.12 per kilowatt-hour, the traditional incandescent mini-light sets each cost about \$1.73 to operate, while LED mini-light sets only cost \$0.26. Energy savings pay for the new LED mini-lights in four to eight years. Not bad.

When I look at the large C9 lights for exterior lighting, a strand of 25 traditional incandescent lights will cost about \$12 to purchase and \$9.72 per season to operate. A new set of 25 LED C9 lights will only cost \$5 to \$10 per 25 lamps. More importantly, electricity to operate them will only cost \$0.09 per season! In other words, energy savings gained by upgrading to LED C9 lights will pay for each new LED replacement strand in about one season or less.

Others have complained LED Christmas lights are not as bright as incandescents. While this may be true when comparing individual bulbs, LEDs produce 10 times or more light than incandescent bulbs given the same amount of electricity. Moreover, multi-color LEDs tend to be more vibrant than incandescent Christmas lights, and they are available in many colors other than the traditional red, orange, yellow, green and blue. Even when selecting white lights, LEDs provide a choice of warm or cool white tones.

The most unusual rationalization I've heard for not upgrading to LED Christmas lights is safety. The person arguing this opinion pointed out some LEDs contain lead and other heavy metals that are toxic to humans. After listening to them, I pointed out most Christmas light manufacturers use lead in PVC insulation that insulates Christmas light wiring regardless of the lighting technology, albeit in trace amounts. That being said, LEDs and traditional incandescent Christmas lights are currently not considered toxic by law and can be disposed of in regular landfills.

If anything, LEDs provide greater safety than incandescent Christmas lights. Because of the heat they generate, incandescent bulbs must be made from glass, which can break and easily cut someone mishandling them. LEDs use plastic, which reduces accidental cutting hazards. As incandescent bulbs become hot, they can also become a fire hazard if operated too close to flammable substances. To the contrary, LEDs remain cool enough to touch even after hours of operation. The high operating temperature of incandescent lights is a direct result of the inefficient conversion of electricity to light. Consequently, incandescent Christmas lights can easily overload electrical circuits and must carry warnings and advise no more than five strands per circuit. By comparison, some LED sets state you can connect up to 50 strings without concern.

That brings me to my final justification for using incandescent Christmas lights: nostalgia. They bring back memories of being three years-old, then four the following year. I traveled with my parents for what seemed like hours as we made our way to grandpa and grandma's farm for the holidays. As we drove into the evening and came to the last mile, our car would crest the final hill. At that point, I would be overwhelmed at the glowing incandescent splendor of grandpa's luminary creations. Though still so far away, their brilliance cut through the night and made promise of the food, family and fun to be shared over the next few days. Their warm radiance assured security and love.

But today, as I approach grandpa's age of when those magic memories occurred, I'm realizing it's not that I want to go back in time to grandpa and grandma's. Instead, I'm hoping my children, and someday, grandchildren, will have many of the same feelings I had when they come back for the holidays. As they gaze on our beautifully-illuminated home, it won't be the lighting technology that creates those sentimental memories they will cherish for years to come. Rather, it will be the special time we share together at this most-special time of year.

Looks like I need to go to a hardware store and get some LED Christmas lights. Merry Christmas.

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