

EnergyWatch



April 2014

<http://www.attardimarketing.com/energywatch/>
www.energywatchblog.com

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1. *Vision is the ability to see the invisible...Jonathan Swift*
 2. *Discovery consists of looking at the same thing as everyone else and thinking something different.*
Albert Szent-Gyorgi
 3. *Vision without action is a daydream...Action without vision is a nightmare. Confucius*
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Something to Think About...

After 20 years, more than 1000 emails and just about as many March Madness and Super Bowl commentaries -- my EnergyWatchBlog has been transitioning into a dynamic new website called EnergyWatchNews.

The goal of this new website is to continue to effectively reach thousands of key decision makers with current electrical / lighting energy-industry news in a powerful and cost-effective way.

Bookmark it.....Drop it in your Favorites [EnergyWatchNews at http://energywatchnews.com/](http://energywatchnews.com/)


I promise to continue to make it the best site for current energy efficient news and commentary in the electrical / lighting market all in one place.

With Lightfair scheduled for the first week of June, let your customer's know by advertising with us on EnergyWatchNews. Just hit "Advertise with US" at the top of the site for all the details. In addition to the current energy news, we offer lots of opportunities to post that which is of interest to you and your company:

1. Open jobs
2. Product Showcase & Product Promotions
3. Case Studies
4. Industry Research & Whitepapers
5. Training
6. Industry Events and Shows.

Let me know what you think, add it to your favorites and I will continue to alert you to the news...

LED Issues to Watch...

- 1. *By 2020, LEDs May Rival Incandescent Bulbs in Cost without Rebates*** - New data from the [U.S. Energy Information Administration](#) shows how far the cost of LEDs has fallen since 2010. The agency projects that the technology will approach price parity with CFLs and incandescent bulbs around the end of the decade. A [2012 report from the U.S. Department of Energy](#), however, forecasts that LEDs will make up only 36 percent of lumen-hour sales in the lighting market in 2020, a figure that is expected to grow to 74 percent by 2030. But the DOE has already [revised its projections upward three times](#) in the past five years. The department now has a goal of 224 lumens per watt efficacy at \$0.70 per thousand lumens by 2020. EIA's projections would suggest that this is too ambitious a goal to achieve; its forecast is closer to 150 lumens per watt by 2020. <http://www.greentechmedia.com/articles/read/can-leds-be-nearly-as-cheap-as-incandescents-by-2020>
- 2. *Toshiba International Corporation Announces Lighting Business Reorganization*** - Toshiba Lighting and Technology Corporation (TLT), headquartered in Yokosuka, Japan, is responsible for Toshiba's global lighting businesses and is implementing a reorganization of international operations. As a result, the LED Lighting Systems Division within TIC will discontinue most operations by March 31, 2014. The headquarters' responsibility for Toshiba Lighting in the Americas will be transferred to Greenstar Lighting Products Inc. located in San Antonio, Texas. Greenstar is a wholly owned subsidiary of TLT. In the Americas, these changes include:
 - Transfer of U.S. street lighting operations to Greenstar;
 - De-emphasis of lamps and light bulb products
 - Increased focus on professional grade street and outdoor lighting systemshttps://www.toshiba.co.jp/about/press/2010_12/pr2402.htm
- 3. *Toshiba Seeks Europe Lighting Tie-Ups to Take on Philips*** - Toshiba Corp. plans to sign at least three partnerships in the next 12 months to manufacture lighting fixtures in Europe as it seeks to become the region's third-biggest supplier of LEDs. Tokyo-based Toshiba, which until 2009 only sold LEDs in Japan, plans to reach a top 3 spot in Europe by 2020, threatening the dominance of Royal Philips NV and Osram Licht AG in a global market forecast to reach \$42 billion by 2019. <http://www.bloomberg.com/news/2014-03-18/toshiba-seels-europe-lighting-tie-ups-to-take-on-philips.html>
- 4. *ASE Test Develops Industry's First SSL Test System*** - ASE Test, a division of Automation South Electronics, has developed the industry's first automated test system that is specifically designed for quickly testing the electrical performance of LED drivers, LED arrays and LED fixtures. Designated the ASE SSL 3.0 Test System, this flexible test system can be used for design, design validation and volume manufacturing testing to verify quality of production. <http://www.asetest.net/>
ASE Test backgrounder.doc
- 5. *Transforming the Lighting Landscape*** - The L Prize competition will substantially accelerate America's shift from inefficient, dated lighting products to innovative, high-performance products. Just as Thomas Edison transformed illumination over a century ago, the L Prize will drive innovation and set "reach" performance goals for the industry. Sponsored by the U.S. DoE, the L Prize is the first government-sponsored technology competition designed to spur lighting manufacturers to develop high-quality, high-efficiency solid-state lighting products that set leading-edge performance benchmarks for industry. <http://www.lightingprize.org/>



6. **DOE Publishes Special CALiPER Report on Retail Lamps** - A special report on LED lamps available through the retail marketplace and targeted toward general consumers. The report follows similar reports published in 2011 and 2012. LED replacement lamps are available through many retail outlets, and CALiPER testing offers insights on performance trends from year to year. For the new report, a total of 46 A19, PAR30, and MR16 lamps were purchased from retail stores in 2013. Instead of a random sample, the products were chosen to answer specific hypotheses about performance. The key findings are available for download at: http://apps1.eere.energy.gov/buildings/publications/pdfs/ssl/caliper_retail-lamps-study3.pdf

7. **DOE Announces \$10 Million Funding Opportunity for Innovative Commercial Building Technologies** - To help demonstrate and deploy energy-efficiency technologies for commercial buildings, including projects that will bring next-generation building systems and components to a broader market faster. Under this opportunity ([DE-FOA-0001084](#)), DOE seeks to fund demonstration and deployment activities for technologies that are ready for market. Applicants must submit a concept paper by March 31, 2014, in order to be eligible to submit a full application by May 19. More information can be found at <https://eere-exchange.energy.gov>

8. **DOE Webinar: Maintenance Practices for LED Streetlights** - On Monday, April 14, DOE's [Municipal Solid-State Street Lighting Consortium](#) will host a 90-minute live webinar entitled *Maintenance Practices for LED Streetlights*. The relative newness of LED streetlights naturally prompts important questions about maintenance and reliability, and how to take these issues into account when planning and preparing for a transition to LED street lighting. The webinar will begin promptly at 2:00 p.m. ET (11:00 a.m. PT) and will include a 60-minute presentation, followed by a 30-minute question-and-answer session. For more information / register, visit the [DOE SSL website](#).

9. **DOE Webinar: LED Color Stability—10 Important Questions** - On Tuesday, April 15, the U.S. DOE Solid-State Lighting Program will host a 60-minute live webinar entitled *LED Color Stability: 10 Important Questions*. The lumen maintenance lifetime of many LED products is 25,000 hours or more, but that doesn't mean products are guaranteed to perform the same over that time. One thing that could change is the color of the light, or chromaticity. This webinar will examine the causes of color shift, and look at existing metrics used to describe color shift/color stability in LED lighting. The webinar will begin at 1:00 p.m. ET; will include a 45-minute presentation followed by a 15-minute Q&A session with attendees. For more information / register, visit the [DOE SSL website](#).

10. **DOE Publishes CALiPER Snapshot Report on LED MR16 Lamps** - This report utilizes the LED Lighting Facts[®] program's extensive product database to help industry stakeholders understand the current state and trajectory of the market for that class of products. The key findings are available for download at: http://apps1.eere.energy.gov/buildings/publications/pdfs/ssl/snapshot2014_mr16.pdf

11. **DOE White Paper "Keeping Manufacturing in the United States"** - The solid-state lighting industry is steadily growing and establishing a manufacturing presence here at home. Solid-state lighting was not only born of U.S. ingenuity and R&D, but is riding the crest of a worldwide trend toward greater energy efficiency. This offers a golden opportunity for U.S. manufacturing to take a significant role in SSL. This DOE white paper grew out of DOE's 2010 SSL Manufacturing R&D Workshop. http://apps1.eere.energy.gov/buildings/publications/pdfs/ssl/ssl_whitepaper_july2010.pdf



12. LEDs Chart a New Path for Tunnel Lighting - LEDs are proving their benefits in most outdoor area lighting applications, but the point sources integrated in solid-state lighting fixtures are an especially good match for tunnel applications. The words "dark" and "dingy" appropriately describe many highway tunnels around the world. So when you see a tunnel that is brightly illuminated, with no shadows or dark spots, you may wonder why all tunnels are not well lit. In fact, new installations in many parts of the world demonstrate that well-specified LED tunnel lighting helps a driver's eyes adjust easily and quickly, keeps disruptive maintenance to a minimum, and saves energy while improving light quality. <http://www.ledsmagazine.com/articles/print/volume-11/issue-2/features/ssl-outdoor-ssl/leds-chart-a-new-path-for-tunnel-lighting-magazine.html>



13. Global LED and Smart Street Lighting: Market Forecast (2014 – 2025) - There are currently 281.4 million total streetlights in the world. This number will grow to 339.9 million total streetlights by 2025. The streetlight market is currently undergoing a period of change where legacy streetlights are being replaced with new and more efficient LED or solid-state lighting technology. Taking this new technology a step further, these LED streetlights are also being networked together with communications to become "smart" streetlights. This study analyzes and forecasts the global market for both LED and smart street lighting through 2025. For more information please click on: http://www.researchandmarkets.com/publication/msd9rso/global_led_and_smart_street_lighting_market

14. UL Launches Enhanced Type TL LED Driver Certification Program - UL has announced an addition to its UL Recognized Component Program that is meant to simplify the process of modular LED driver selection for solid-state lighting (SSL) product development teams. The optional Type TL Program places some minimum requirements on modular LED drivers that would allow a luminaire manufacturer more flexibility in swapping from one driver to an alternative assuming both had the Type TL certification. <http://www.ledsmagazine.com/articles/2014/03/ul-launches-enhanced-type-tl-led-driver-certification-program.html>

15. Totally Tubular: Linear LEDs - With an urgent demand for energy efficiency, lighting continues to stake its claim as a solution. T8 and T5 fluorescents—both important evolutions in improved lamps and ballasts—have been landmark offerings and have successfully illuminated interior spaces for decades. Now lighting installers have a new option: a number of major and smaller lighting companies offer linear LED tubes, some with retrofit kits. Their chief advantage has been their lumens-per-watt, sometimes bettering high-quality fluorescent lamps. <http://www.ecmag.com/section/lighting/totally-tubular-linear-leds>

16. This Is What Lighting Will Look Like in the Future Thanks to OLED Technology - OLED (Organic Light Emitting Diodes) is an extremely thin light emitting technology already making its way into cell phones, televisions and other electronics. How soon the technology will be more affordable is unknown. Here is a YouTube video showing the Plus Pendant in action:



<http://www.designntrend.com/articles/11500/20140310/this-is-what-lighting-will-look-like-in-the-future-thanks-to-oled-technology.htm>

17. Better Materials for OLED Lighting - LEDs have been replacing traditional lighting at a rapid pace, offering longer life, more efficiency, lower cost, etc. OLED lighting promises to complement LED lighting by offering better color performance, power efficiency, unique shapes and designs, as well as a thin, lower weight and elegant profile. To enable OLED technology in this emerging lighting market, there is a need to replace traditional materials with new, better-performing materials such as silver nanowires. See more at: <http://www.ledjournal.com/main/blogs/better-materials-for-oled-lighting/#more-9722>

18. LED Industry to Enter 3 Golden Years, Says Epistar Chairman - Mainly due to fast growing global demand for LED lighting, the LED industry will enjoy three golden years during 2014-2017, according to chairman Lee Biing-jye for Taiwan-based LED epitaxial wafer and chip maker Epistar. Global demand for LED lighting as a percentage of all lighting products will increase to at least 30% in 2014, Lee said. LED lighting penetration in the Japan market will remain the highest around the world and is expected to rise from over 50% in 2013 to about 70% in 2014, while the US market will grow from about 10% to 20%, Lee said. Everlight Electronics, the largest Taiwan-based LED packaging service provider, expects double-digit growth in 2014, company chairman Robert Yeh noted. <http://www.digitimes.com/news/a20140320PD213.html>

19. Staples Buying into LED Lighting - The decision did not come without a great deal of research and testing, after which the company realized that LED technology could provide the most effective option for its needs at its corporate headquarters, a 650,000-square-foot building in Framingham, Mass. Staples replaced more than 150 parking lot lighting fixtures in its three parking lots — two employee lots and one for visitors — on campus. The project resulted in a 14 percent energy reduction from the retrofit and was so successful that the company is rolling out LED retrofits elsewhere at its corporate headquarters, as well as at Staples facilities nationwide. <http://www.facilitiesnet.com/lighting/article/Staples-Buying-Into-LED-Lighting--14821>

20. Cree First to Break 300 Lumens-Per-Watt Barrier - Cree, Inc. records another significant LED milestone with the demonstration of 303 lumens per watt from a white, high-power LED. Reaching the landmark achievement much faster than previously believed possible, this result surpasses [Cree's previous R&D industry-best of 276 lumens per watt announced just over a year ago](#). Cree reports that the LED efficacy was measured at 303 lumens per watt, at a correlated color temperature of 5150 K and 350 mA



<http://www.cree.com/News-and-Events/Cree-News/Press-Releases/2014/March/300LPW-LED-barrier>

- 21. LEDs Taking Big Share of Lighting Market** - Sales of LEDs are now making up a larger percentage of many electrical manufacturers' total lighting sales and a new DOE report says that adoption of LED lighting is happening far faster than many had expected. Packaged LED revenue hit \$13.7 billion in 2012, while SSL revenue for lamps and luminaires combined reach \$11.8 B. Both markets will continue to grow through 2017 although LED revenue growth will be moderated by falling component prices even as more LEDs are manufactured. The DOE study is titled: *Solid State Lighting: Early Lessons Learned on the Way to Market*. <http://www.tedmag.com>
- 22. LEDucation 8 Event Exceeds Expectations** - Over 220 leading manufacturers from the United States, Canada, and Europe exhibited their latest Solid State Lighting technologies and products during the busy table top expo recently held in midtown Manhattan at the Sheraton NY Times Square hotel. The LEDucation Educational Sessions offered 8 accredited courses and 8 hours of educational programming covering topics in healthcare lighting, controls, budget management with LED projects, lighting design, codes and compliance and more. To continue to share the educational sessions with those that were not able to attend, all presentations from LEDucation are available for viewing online with daily session videos to be posted soon at www.LEducation.org
- 23. LG Unveils Smart Lamp: Intelligent Bulb Links with IOS and Android Devices** - The future of home lighting is finally here. At least that's what LG Electronics thinks after unveiling a new type of "smart bulb." Unlike other LED bulbs, LG's new "smart bulb" has a nifty new trick; Bluetooth connectivity. This new bulb can interface with a variety of devices including smart phones, tablets and other "smart" devices. After installing a purpose built app, home owners will be able to take control of their home's light bulbs with a few taps and finger swipes on a mobile phone. LG's LED Smart Lamp will retail at around \$32.50 for a 60 watt bulb, about half the price of the Philips HUE. <http://www.techtimes.com/articles/4727/20140324/lg-unveils-smart-lamp-intelligent-bulb-links-with-ios-and-android-devices.htm>
- 24. Daintree and LG Partner on LED Lighting and Controls** - LG Electronics has quietly launched the beginnings of a lighting business in North America. LG Electronics and Daintree Networks have announced a partnership intended to spur deployment of wirelessly-connected commercial lighting systems that are integrated with building- and energy-management systems. The partners have integrated support for the ZigBee wireless network directly into the LG drivers that will be used in the recessed-troffer SSL fixtures. The Daintree ControlScope management platform will be able to control the LG fixtures and also link the lighting system to building-management systems and/or to the evolving smart grid. <http://www.ledsmagazine.com/articles/2014/03/daintree-and-lg-electronics-partner-on-led-lighting-and-controls.html>
- 25. Zhaga Moves to Promote Interchangeable LED Modules and Drivers** - The Zhaga Consortium, an international organization set up to provide global standards that promote interchangeability of LED light engines, has decided to pursue making the individual LED modules and drivers - the parts which make up a light engine - interchangeable as well. In an announcement last week, the group said it would produce future editions of its interface specifications (which it calls "Books") to [include references to specifications that define the module-driver electrical interface](#) a facet of light-engine design and construction that Zhaga has previously excluded. <http://ecmweb.com>



26. Should the DesignLights Consortium (DLC) Change Three Requirements? by Stan Walerczyk - Although DLC has been doing a good job getting new LED fixtures approved, which they do much faster than Energy Star, and DLC's requirements for minimum lumens per watt (LPW) and color rendering index (CRI) can be considered good, let's look further. DLC has three requirements, which should be investigated.

- 1) Minimum lumen requirements
- 2) Maximum Kelvin
- 3) If there is no existing category, even the best LED product cannot be approved

This whitepaper is available at stan@lightingwizards.com or at www.lightingwizards.com

27. Contractor's Corner: LEDs and Retrofits by Stan Walerczyk - With LED products, the lighting retrofit industry has to change. First of all, it is important not to buy and install earlier version LED products. Often the specifications are made six months, one year or even longer before the products are ready to be purchased. So an old list should be checked to make sure the newest and best LED products are used. <http://www.tedmag.com> Free whitepapers at: stan@lightingwizards.com

28. UV-LED Advancements Extend the Promise in Curing - The year 2013 witnessed an expansion of LED usage in UV curing applications with higher-power emitters enabling faster cure times across a variety of life science and industrial applications. <http://www.ledsmagazine.com>

29. 2014 DOE Solid-State Lighting Manufacturing R&D Workshop - May 7–8, 2014 • San Diego, California. What manufacturing innovations are needed to keep pace with SSL technology developments? Join DOE—and lighting industry experts representing the entire SSL supply chain—at the sixth annual SSL Manufacturing R&D Workshop. Gain cutting-edge perspective on manufacturing issues related to LED and OLED lighting. Register at: <http://www1.eere.energy.gov/buildings/ssl/sandiego2014.html>

National Energy Issues to Watch...

30. Rebate Trends for 2014 - Rebate organizations have been busy updating their rebate and incentive programs for 2014. While not all of them operate on a calendar year, we can still see a lot of changes and trends in the industry. Right now, **71% of the country is covered by an active commercial lighting rebate**. We have also noticed a few other trends. <http://www.briteswitch.com>

31. DOE Announces New Energy Efficiency Standards for MH Luminaires by Craig Dilouie - The U.S. DOE recently issued new energy efficiency standards for ballasts sold as part of new metal halide luminaires. (To be clear, replacement ballasts are not covered.) The new rules strengthen current standards while expanding their scope, and will affect availability of 50-1000W luminaires. The deadline for compliance is Feb. 10, 2017. The new DOE energy efficiency standards will shake up the metal halide category, promoting efficient pulse-start options, particularly electronic ballasts. <http://lightingcontrolsassociation.org/doe-announces-new-energy-efficiency-standards-for-mh-luminaires/>
http://www1.eere.energy.gov/buildings/appliance_standards/product.aspx/productid/49

32. tED Magazine Celebrating Its 50th Anniversary - As part of the celebration, tED magazine will have a special section each month throughout 2014. They are also asking for your contributions to a year-long series of stories. As a first step, they are asking that you to visit their Facebook page at www.facebook.com/tedmagazine or Twitter page at www.twitter.com/tedmagazine



- 33. *BP Forecast: US Is Destined to Be an Energy Giant Again*** - Domestic energy production is destined to outstrip consumption in coming years, led by natural gas and U.S. dominance as the world's biggest producer, so that the nation will stand totally energy independent by 2035, according to a long-range global study by oil giant BP. Worldwide, demand for energy will go up 41 percent by 2035, primarily because of use in emerging economies, BP estimated. During that time period, the U.S. share of global demand is expected to decline to 13 percent from the current 18 percent, and China's demand will go up to 27 percent from the current 22 percent. <http://www.moneynews.com>
- 34. *Voters Overwhelmingly Support Energy Efficiency*** - The poll released by NEMA and NAM commissioned by McLaughlin & Associates, found that 9 in 10 likely voters support energy efficiency as a key part of the solution addressing our energy challenges. Results showed a desire for greater adoption of efficient technologies throughout our economy, including the federal government, where tax dollars can be saved. A national survey among 1,000 likely voters clearly illustrates broad support for energy efficiency that cuts across demographic and political lines. Two-thirds are more likely to vote a candidate for Congress who supports energy efficiency policies. <http://www.nema.org/Policy/Documents/National-NEMA-NAM-Memo.pdf>
- 35. *NEMA Commends House Passage of Energy Efficiency Improvement Act*** - The U.S. House of Representatives has strong support of energy efficiency and the role it plays in addressing our domestic energy needs by passing HR 2126, the *Energy Efficiency Improvement Act*, by a vote of 375-36. Key provisions of HR 2126 at: <http://energycommerce.house.gov/fact-sheet/energy-efficiency-improvement-act-2014>
- 36. *NEMA's Lighting Systems Index Gains Traction During Fourth Quarter*** - Increasing by 1.8 percent compared to the previous quarter. The index increased 4.7 percent on a year-over-year basis. Index components for emergency lighting, fixtures and miniature lamps posted gains, while ballasts and large lamps retreated q/q. Overall performance during calendar year 2013 placed the index nearly 17 percent above the depressed level of the recession during 2009. <http://www.nema.org/News/Pages/Lighting-Systems-Index-Gains-Traction-During-Fourth-Quarter.aspx>
- 37. *NEMA Comments on Recent WTO Rare Earth Decision*** - NEMA acknowledged the recent dispute settlement panel decision of the World Trade Organization (WTO) released March 26, 2014, holding that China's export quotas and export tariffs on rare earth elements, tungsten, and molybdenum violated the General Agreement on Tariffs and Trade, and China's accession agreement to the WTO. The Complainants included Japan, the European Union, and the United States. According to the panel report, China had "not demonstrated that its 2012 export quota on rare earths was not applied in a manner that constitutes arbitrary or unjustifiable discrimination or a disguised restriction on international trade." www.nema.org
- 38. *Indoor Lighting Can Affect Decision Making*** - Facility managers may want to take care while adjusting indoor lighting. According to new research, the way a room is lit can affect decision making, with bright light acting as a possible catalyst for more intense emotions. Researcher Alison Jing Xu says the effect bright light has on our emotional system may be the result of the light being perceived as heat, and the perception of heat can trigger our emotions. The majority of everyday decisions are also made under bright light. So turning down the light may help people make more rational decisions. <http://www.sciencedirect.com/science/article/pii/S1057740813001174>



39. Fluorescent Lamps: The Dominant Technology in Major Industry Verticals - The global lighting industry is witnessing a sea change, with constant replacement of old technologies with newer, more energy efficient lighting technologies. For the present however, fluorescent lamps, including linear fluorescent and CFLs, dominate the global lighting market in value terms. Over the next few years, fluorescent bulbs are expected to lose to LEDs as mainstream replacements. This report analyzes the worldwide markets for Fluorescent Bulbs in US\$ Million. The report provides separate comprehensive analytics for the US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa, and Latin America and profiles 77 companies including many key and niche players. Annual estimates and forecasts are provided for the period 2010 through 2018.

http://www.researchandmarkets.com/publication/mgkhdlg/fluorescent_bulbs_global_strategic_business

40. Halogen Bulbs - Global Strategic Business Report - Halogen bulbs, considered to be the efficient version of energy-inefficient traditional incandescent bulbs witnessed impressive growth over the last decade, driven primarily by the replacement opportunities offered as a result of phasing out of incandescents. The share of halogen bulbs in the global lighting market is expected to shrink over the next few years. As stated by the new market research report, that profiles 84 companies, Western Europe and the United States dominate the market worldwide. Asia-Pacific, which emerged as a key market over the past decade, is projected to witness a CAGR of 6.6% over the analysis period.

http://www.researchandmarkets.com/publication/mi5j5wp/halogen_bulbs_global_strategic_business_rep

41. Shopping for Light Bulbs - Beginning in 2012, everyday light bulbs have to meet new Department of Energy standards for how much energy they use. Bulbs that don't will be phased out over the next couple of years. Along with this move to more efficient bulbs comes a new way to shop for them.

<http://www.consumer.ftc.gov/articles/0164-shopping-light-bulbs>

42. The ENERGY STAR Lighting Road Mapping Web Page Is Now Live - The page offers meeting materials including a high level summary of discussions from the January 30, 2014 meeting at NEMA headquarters. Stakeholders can visit at: www.energystar.gov/products/specs/lightingroadmapping To facilitate ongoing engagement on the topics addressed in the first meeting, Alex Boesenberg of NEMA will be setting a series of conference calls, beginning **March 27, 2014 from 1:30-3:00pm ET**. If you are interested in participating, contact Alex.Boesenberg@nema.org

43. The Right Light: Color Tuning by Craig DiLouie - While light makes sight, lighting shapes perception, particularly in regard to color in the things we see. This is because visible white light is made of colors. For us to see an object as a certain color, that color must be present in both the light and the object. Electric lamps typically do not emit light in a balanced color spectrum; the relative intensities of different colors, therefore, affect the appearance of a space.

<http://www.ecmag.com/section/lighting/right-light-color-tuning>

44. Will the US Choose the Right Road to a New Energy Future? - The United States is currently facing a very unique situation — the first of its kind — as we decide how to upgrade and expand our energy infrastructure. Many are afraid that investing in a new energy system is too expensive and would cost trillions of dollars. The truth is that the investment choices we make today will determine whether we build a resilient, reliable energy system. What we need is a modern system that will maximize economic benefits, put the consumer in control, and utilize innovation and technology all while attaining steep reductions in greenhouse gas emissions. <http://www.renewableenergyworld.com>



45. Hubbell Lighting Launches Lighting Upgrade Program for Colleges and Universities -Hubbell Lighting announced a new energy efficient lighting program to cut electricity costs by 84%, enhance the quality of light and reduce the financial risk of upgrades. The initiative, called **createchange®** consists of two innovative offerings from Hubbell Lighting:

- A suite of unique audit tools and other product selection resources that allow schools to precisely forecast the economic impact of various lighting retrofit strategies and identify any utility rebates that are available.
- A 90-day risk-free trial program called "Compare in the Air", which allows customers to validate cost saving estimates in buildings or outdoor environments with up to four Hubbell Lighting products. <http://www.hubbellighting.com/solutions/retrofit/applications/education>

46. HBA's Wireless Street Lighting Controls System - wiSCAPE™ by Hubbell Building Automation®, is a Wireless Street Lighting Controls Solution that enables utilities and municipalities to manage, monitor and meter each individual streetlight throughout the city. wiSCAPE uses a combination of fixture modules and gateways to create a secure peer-to-peer, self-organizing and self-healing mesh network infrastructure. Whether it's two modules in an alleyway or thousands of modules across the city, wiSCAPE is scalable for any street lighting need, and works with all fixture types and is ideal for both new and retrofit applications. <http://www.hubbell-automation.com/>



47. Smarter, Brighter, Faster, Stronger - In a fast-evolving industry full of data with few who understand it, Lumigent provides clients with the tools to become their own lighting experts with its audit-to-proposal platform. What Lumigent offers is software that makes lighting specifications and report-generation quick and easy so that building owners can more easily understand the benefits of implementing an energy-efficient lighting and controls project. <http://gbdmagazine.com/2014/26-lumigent/>

48. Halogen A-line Lamp Shipments Continue to Rise During Fourth Quarter - Posting an increase of 41.8 percent over the previous quarter. Similarly, the index for LED A-line replacement lamps increased 42.3 percent during the quarter. CFL and A-line incandescent lamp shipments trended in the opposite direction by slipping 0.4 and 10.6 percent q/q, respectively. The index for CFLs declined by 2.4 percent for the whole of 2013 versus 2012. Meanwhile, the A-line incandescent index registered an annual decline of 13.5 percent. Incandescent lamps ceded 4.3 percentage points of the combined A-line market during the quarter, with a share of 51.5 percent. Shipments of CFLs garnered a share of 33.8 percent, a decline of 0.3 percentage points. Shares of halogen and LED A-line lamps increased to 13.6 and 1.1 percent, respectively. www.nema.org

49. Choosing an Occupancy & Light On/Off Data Logger - White paper from Onset provides guidance on features to consider when choosing an occupancy and light on/off data logger. Learn how to select the right logger for identifying locations in your building where changes in lighting could result in immediate money and power savings. The **HOBO UX90 Occupancy & Light** data logger monitors room occupancy and indoor light changes to identify occupancy patterns and determine energy usage and potential savings. <http://on.onsetcomp.com/ae22>



50. *The National Electrical Manufacturers Association (NEMA) has published:* <http://www.nema.org>

- ⚙ **For Roadway and Area Lighting Equipment—Dimming Control Between an External Locking Type Photocontrol and Ballast or Driver**
- ⚙ **American National Standard for Roadway and Area Lighting Equipment—Solar Lighting Systems**
- ⚙ **Standard for Solid State Light Sources Used in Roadway and Area Lighting**
- ⚙ **Two Standards for Roadway and Area Lighting Equipment**
- ⚙ **Two Standards for Roadway and Area Lighting**
- ⚙ **American National Standard for Roadway and Area Lighting Equipment—Tunnel and Underpass Lighting Luminaires**

51. **GLOBALCON 2014 Presented by The Association of Energy Engineers** - The multi-track conference covers a broad range of currently relevant topics, and gives you the opportunity to hear first-hand from some of the major players in the energy field. The GLOBALCON Expo will emphasize critical areas of leading edge technology and related services <http://www.globalcovevent.com>

52. **Registration Is Now Open for LIGHTFAIR® International (LFI®) 2014 Conference** - Brings together top lighting and design experts to create the largest Conference in LFI's 25-year history. The Conference continues as a centerpiece of the world's largest annual architectural and commercial lighting trade show and conference, which will take place in Las Vegas June 1-5, 2014 (Trade Show: June 3-5; Conference: June 1-5). The 2014 Conference curriculum will champion integrated design as a central theme linking all courses, workshops and seminars in common focus to illustrate how technology, tools, problem-solving and inspiration converge in contemporary practice. <http://www.lightfair.com/lightfair/V40/index.cvn?id=10189>

53. **It's New York for LIGHTFAIR® International 2015** - The 26th annual LIGHTFAIR® International (LFI®), the world's largest annual architectural and commercial lighting trade show and conference, returns to New York at the Jacob K. Javits Convention Center May 3-7, 2015 for the first time since 2009. http://www.lightfair.com/lightfair/V40/press.cvn?id=11&p_id=321

54. **37th Annual NAILD Conference - April 6 - 9, 2014 - At the Hyatt Pier 66 in Ft Lauderdale, FL** - The National Association of Independent Lighting Distributors (NAILD), is a non-profit trade association with a mission to provide the opportunity to grow your business profitably through education, networking and technology. NAILD continues to be extraordinary in the lighting industry. Visit <http://www.naild.org>

SHINING A NEW LIGHT ON NAILD

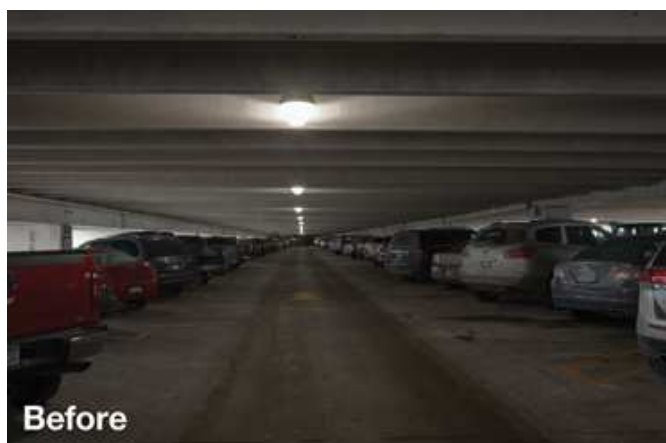


55. **2014 NAESCO Annual Conference and Vendor Showcase** - The National Association of Energy Services Companies (NAESCO) will host its 31st Annual Conference & Vendor Showcase in Carlsbad, CA, November 18-20, 2014 at the Park Hyatt Aviara Resort. For more than 25 years, NAESCO has been the preeminent national trade organization representing and promoting the energy efficiency industry in the marketplace, the media, and the government both at the state and federal level. <http://www.naesco.org/events/conference/annual/default.htm>



State Energy Issues to Watch...

- 56. Top 10 LEED States of 2013** - The USGBC released its ranking of the Top 10 States for LEED, the world's most widely used and recognized green building rating system. The list highlights the regions around the country that are at the forefront of sustainable building design and transformation. The States in 2013 include: **Illinois; Maryland; Virginia; Massachusetts; New York; California; Oregon; North Carolina; Hawaii; Minnesota; Washington DC** (not ranked as it is a federal district). <http://www.edcmag.com/articles/95477-top-10-leed-states-in-us>
- 57. New Research Finds Solar Jobs Growing Quickly Across Surprising Mix of States** - The solar industry experienced record-breaking job growth across the U.S. last year, according to The Solar Foundation (TSF), an independent 501(c)(3) research and education nonprofit. TSF released new state-specific numbers that show major solar job gains in both traditional and burgeoning markets. California and Arizona continued to lead the way. <http://thesolarfoundation.org/solarstates>
<http://ecmweb.com/contractor/new-research-finds-solar-jobs-growing-quickly-across-surprising-mix-states>
- 58. CUNY Gets ARPA-E Funding for Metacapacitors for LED Lighting** - City University of New York (CUNY) Energy Institute is developing less expensive, more efficient, smaller, and longer-lasting power converters for energy-efficient LED lights. LEDs need more sophisticated converters because they require a different type of power (low-voltage direct current, or DC) than what's generally supplied by power outlets. CUNY Energy Institute is developing sophisticated power converters for LEDs that contain capacitors made from new, nanoscale materials. <http://www.arpa-e.energy.gov/?q=arpa-e-projects/metacapacitors-led-lighting>
- 59. LED Solutions Improve Lighting Performance and Efficiency at Detroit Metropolitan Airport** Eaton has announced that its Cooper Lighting division's Ventus LED luminaires are replacing 6,050 existing parking garage fixtures at the Detroit Metropolitan Airport (DTW) to improve efficiencies and optical lighting performance. The conversion will result in a 66 percent reduction in power consumption with an anticipated overall energy and maintenance savings of approximately \$1.2 million annually. <http://www.ledjournal.com/main/markets/applications/led-solutions-improve-lighting-performance-and-efficiency-at-detroit-metropolitan-airport/#more-9880>



- 60. IES Philadelphia: Fundamentals of Lighting** - The IES Fundamentals of Lighting course (formerly ED100) provides comprehensive instruction on state-of-the-art lighting practices. In a basic straightforward manner, the course modules provide up-to-date material on systems, equipment, calculation procedures, and terminology. This seven week course is ideal for individuals relatively new to the lighting industry, having only a basic awareness of lighting, and for professionals who want a thorough overview of the field. Click on: **Register Now!**
- 61. Ameresco Begins Implementation of ESPC as Part of GSA's National Deep Energy Retrofit Program Challenge** – The GSA's \$45 million Energy Savings Performance Contract (ESPC) is underway. The GSA selected Ameresco to develop a comprehensive ESPC addressing over one million square feet of office space at the New Carrollton Federal Building in Lanham, MD and the Silver Spring Metro Center 1 building in Silver Spring, MD. Both buildings will be modernized with the installation of 11,000 individually addressable LED lighting fixtures controlled by a network of sensors. Over 2,000 sensors will be installed in the two buildings. Capable of sensing occupancy and ambient light, the system will automatically adjust light output to match current conditions. The new lighting control systems will integrate into existing and new DDC control systems allowing the HVAC systems to heat and cool only occupied spaces. 3/18 BUSINESS WIRE
- 62. Benton City, WA Gets New LED Street Lights** - Benton City is one of six small towns in the state of Washington to receive new, power-efficient LED street lights for free. Swapping out incandescent bulbs for LEDs is a pilot program of the state Transportation Improvement Board. Benton PUD will be replacing 119 of the lights and Benton Rural Electric Association will replace 11 of the street lights. Benton City also has 53 street lights and has contracted with Sun River Electric of Kennewick to replace those with the new LEDs. 3/12 Tri-City Herald
- 63. Hawaii Energy Program to Replace Old Lighting for Free for Small Businesses** - Hawaii Energy, the ratepayer-funded energy conservation and efficiency program for Oahu, the Big Island, Maui, Molokai and Lanai, is offering small businesses and restaurants an opportunity to replace their old lighting with newer energy-efficient ones for free between now and June 9. Businesses pay about 33 cents per kilowatt hour on Oahu. Businesses with work space of less than 5,000 square feet qualify. <http://www.bizjournals.com>
- 64. 32nd Annual West Coast Energy Management Congress (EMC) - June 25-26, 2014, Washington State Convention Center, Seattle, Washington** - For business, industrial and institutional energy users. It brings together the top experts in all areas of the field to help you set a clear, optimum path to energy efficiency, facility optimization and sustainability, as well as innovation solutions to improve your ROI. <http://www.energyevent.com/>
- 65. World Energy Engineering Congress - October 1-3, 2014, Washington Convention Center / Hall A Washington, DC** - Now in its 37th year, AEE's WEEC is well-recognized as the most important energy event of national and international scope for end users and energy professionals in all areas of the energy field. The 2014 WEEC featured Keynote Speaker will be President Bill Clinton. <http://www.energycongress.com/>

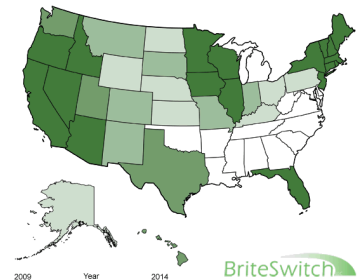


Monthly Special Feature... <http://www.briteswitch.com>

Rebate Trends for 2014 - Rebate organizations have been busy updating their rebate and incentive programs for 2014. While not all of them operate on a calendar year, we can still see a lot of changes and trends in the industry. Right now, **71% of the country is covered by an active commercial lighting rebate**. We have also noticed a few other trends.

The US is Going Green

This map shows how the commercial lighting rebate climate has changed since 2009. As states and utilities struggled to meet electric demand, more and more energy efficiency programs were developed in order to help curb energy usage. These programs helped the utilities by saving the power which meant they wouldn't have to build new power plants to keep up with needs.



Programs Getting New Funding

Last year, quite a few rebate programs, such as Consumers Energy in Michigan and SureBet Nevada, exceeded their budget, ending the programs earlier than planned. This year, they have new funding again and are accepting applications for 2014 projects. [Click here to see a map with how lighting rebates have changed in the past 5 years](#)

More Prescriptive Programs for LEDs

We've seen more organizations expanding their programs, now offering prescriptive rebates for a larger variety of solutions such as LED highbay fixtures, LED outdoor pole lights, TL fixture replacements, and even some LED T8 replacements. **In 2014, LED rebates have continued to expand with 16% more prescriptive rebates than last year.** The dollar amounts have remained relatively stable compared to last year, which is surprising given the falling prices of LEDs. [See the average rebate amounts for LEDs.](#)



T12 Rebates Continue to Decline

As expected, T12 to T8 rebates took a tumble this year compared to 2013. Because it is becoming harder to find replacement T12 lamps and ballasts, many rebate programs feel they don't need to offer incentives anymore for people to upgrade. **Between this year and last year, the number of rebates available for T8 installations decreased by 18%.** While the dollar amount of the rebate remains relatively stable from last year, many programs are requiring the use of high performance or reduced wattage T8 lamps. **In fact, 60% of T8 rebates require CEE approved lamps and ballasts.** [Learn more about T12 to T8 rebates.](#)

