

EnergyWatch



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

Politics is the art of looking for trouble, finding it everywhere, diagnosing it incorrectly and applying the wrong remedies. Groucho Marx:

If you put the Federal government in charge of the Sahara Desert, in 5 years there'd be a shortage of sand. Milton Friedman

Thank God we don't get all the government we pay for. Will Rogers

If you would not be forgotten, as soon as you are dead & rotten, either write things worth the reading, or do things worth the writing. Ben Franklin

Something to Think About... LEDFAIR IS NEXT WEEK.....

As I have said many times, I really look forward to LIGHTFAIR and especially this year. For me, it's a reunion with the many friends and relationships with which I have grown in this wonderful industry. I jest about it being called LEDfair but will we see much of anything else. Electronics are changing our lighting world too as no other innovation over the years has had the potential to upgrade all, and I mean all, the traditional technologies. Incandescent, halogen, fluorescent, CFL, HID, miniature, sealed beam, you name it and one day we will be segmenting light emitting diodes.

My pleasure is that I am on the invitation list of many of the exhibitors at the show.....my emails are ringing off the hook (I guess I can't say this anymore.....times are a changin). I promise to visit every single one of you. I have three days to do it.....not even the casino will stop me.

Obviously, time needs to be attentive to what the major market shareholders are doing. The Big Three in lamps; the Big Four in luminaires; special attention to the major electronics corporations: Cree, Everlight, LG, Nichia, Samsung, Seoul, Siemens; controls: Leviton, Lutron, Wattstopper; and the unique innovators: Amerlux, Con-Tech, Juno, Lamar, LEDtronics, MaxLite, RAB, Satco, Sensity, Soraa, TerraLux, Ushio, Westinghouse..... If I left anyone off, then show me whatcha got!

And stay tuned to this EnergyWatchNews after the show to get my reaction and the reaction of my colleges. Safe trip and look forward to seeing you all in Las Vegas.



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Our business is changing your future...

LED Issues to Watch...

1. ***Lighting Creates a Turning Point in the LED Industry*** - Looking at earnings results for LED companies, it is apparent that 2013 was a turning point for the LED industry. On a revenue basis, LED package companies are growing and performing better than LED chip companies. LED package companies have expanded their business model to modules and applications, increasing revenue and profit. LED package companies did not need to make as many investments as chip companies, and since they had lower capital expenditures, package companies were able to invest in new businesses, such as branded products or automotive applications. Learn more: <http://www.ecnmag.com/news/2014/05/lighting-creates-turning-point-led-industry>
2. ***Survey Shows LED Installations Surpassing Fluorescents for the First Time in 2014*** by [Doug Chandler](#) - Lighting professionals expect to install more LED than fluorescent fixtures over the coming year, the first time this has happened, according to the 4th annual [lighting survey by energy-efficient lighting manufacturer Precision-Paragon \(P2\)](#), an energy-efficient lighting specialist that's part of Hubbell Lighting. When asked in the survey what is the dominant lighting technology they expect to install in 2014, 49% of respondents selected LED and 46% indicated fluorescent. In last year's survey, 26% of respondents selected LED and 68% indicated fluorescent as the dominant lighting technology they expected to install in 2013. <http://electricalmarketing.com>
3. ***EW's Top 10 LED Products for April 2014*** - The LED manufacturers featured in our Top 10 LED Product Picks are Kim Lighting/Hubbell, Peerless/Acuity Lighting, Cree, Lutron NSPC/Nova Lighting, GE Lighting, Halco, Orbit Electric, Philips and JESCO Lighting Group. <http://ewweb.com/lighting/ews-top-10-led-products-april-2014>
4. ***Energy Efficient Lighting Cuts Energy Use in U.S. Parking Facilities by 90%*** - The U.S. Energy Department's Better Buildings Alliance is supporting the Lighting Energy Efficiency in Parking (LEEP) Campaign, which to date has helped more than 100 U.S. businesses and organizations with planning or installing energy efficient lighting in their parking lots and garages. In the past year, these organizations have committed to install efficient lighting across more than 270 million square feet of parking space. Building owners spend more than \$6 billion to light their parking lots and garages. LEEP Campaign participants have upgraded their facilities to high efficiency metal halide, fluorescent, and LED solutions that last three times longer than their previous technology and by using controls are able to reduce energy use when parking facilities are not in use. <http://ecmweb.com/>
5. ***DOE Publishes CALiPER Report on Linear (T8) LED Lamps in a 2x4 K12-Lensed Troffer*** - The U.S. Department of Energy's CALiPER program has released Report 21.1, which is part of a series of investigations on [linear LED lamps](#). Report 21.1 focuses on the performance of 31 types of linear LED lamps operated in a typical 2x4 troffer with a K12 prismatic lens. The lamps were intended as alternatives to T8 fluorescents. Overall, many of the tested linear LED lamps provided higher luminaire efficacy than a comparable fluorescent system in a K12-lensed troffer. Given the disparity in cost between LED and fluorescent systems, the financial benefit and long-term cost savings associated with LED retrofits should be considered on a case-by-case basis. For a closer look at the findings, download the [full report](#) from the DOE SSL website.



6. **DOE Publishes Fact Sheet on LED Lighting and Health** - Entitled *Lighting for Health: LEDs in the New Age of Illumination*, it's based on a recent article by 14 leading researchers, which appeared in the journal *Trends in Neurosciences*. Recent research has greatly advanced our understanding that light not only enables vision, but is also a critical signal to our biological systems, affecting circadian rhythms, pupillary response, alertness, and more. However, applying early research findings to widespread lighting practices must be done with great caution, if it's ready to be done at all. To learn more about this complex topic, see the fact sheet: at www.ssl.energy.gov/factsheets.html
7. **DOE Publishes CALiPER Report on Linear (T8) LED Lamps in Recessed Troffers** - The U.S. Department of Energy's CALiPER program has released Report 21.2, which is part of a [series of investigations on linear LED lamps](#). Report 21.2 focuses on the performance of three linear (T8) LED lamps and a benchmark fluorescent lamp in five different troffer types. Also included are the results of a subjective evaluation. The LED lamps were intended as alternatives to T8 fluorescents and were chosen for the study primarily based on their luminous intensity distributions (narrow, medium, and wide beam angles). Download the [full report](#) from the DOE SSL website.
8. **DOE Announces SSL SBIR Funding, New MYPP, and Fact Sheet** The US Department of Energy (DOE) has announced fiscal year 14 (FY14) Release 2 Phase 1 Small Business Innovation Research (SBIR) funding grants to VoltServer, Innotec, Mojo Labs, and OLEDWorks for projects related to solid-state lighting (SSL). The agency has also updated its SSL Research and Development Multi-Year Program Plan (MYPP) identifying new areas in research and product development that require study for both LED and OLED lighting. The agency also has a new fact sheet on LEDs and health that documents the system-level benefits that can be engineered in LED lighting to improve our wellbeing. <http://www.ledsmagazine.com>
9. **Outdoor and Parking Lighting Systems by Navigant Research** - High-Pressure Sodium, Metal Halide, LED, Induction, and Fluorescent Lighting and Lighting Controls: Global Market Analysis and Forecasts. Outdoor lighting systems are a major contributor to global energy use. While LED lighting and controls are making inroads into commercial and domestic lighting, inexpensive high-pressure sodium (HPS) lamps lead in outdoor lighting and will take longer to displace. LED outdoor area luminaires must compete with the other lamp types that are still relatively energy efficient, making it more challenging to achieve lifetime cost savings in a market led by retrofits and replacements. <http://www.navigantresearch.com/research/outdoor-and-parking-lighting-systems>
10. **LED Luminaire Shipments for Outdoor and Parking Applications Will Reach Nearly 14 Million Annually by 2023 by Navigant Research** - Networked outdoor lighting systems will be integrated with smart city initiatives, report finds. Outdoor lighting systems are a major contributor to global energy use. Today, this market segment is dominated by fluorescent, high-pressure sodium, and metal halide lamps. Over the next 10 years, however, LEDs will become the leading lamp type for outdoor installations. According to a new report from Navigant Research, worldwide shipments of luminaires with LED lamps for outdoor and parking applications will grow from 4.1 million annually in 2014 to nearly 14 million in 2023. <http://www.navigantresearch.com/>
11. **New Ideas in Lighting Get Closer to Market** - Two start-up companies are poised to begin selling bulbs that use entirely different technologies — one borrowed from heavy industry and the other from old-fashioned televisions — but meet the new energy standards. 5/04 NY Times



12. Finally Light Challenges LED Lighting with Induction Replacement Lamp -

The Finally Light Bulb Company has announced the induction-based Finally replacement lamp due this summer at a retail price below \$8.00 for a 60W-equivalent product. The company claims that the lamp more closely mimics incandescent bulbs than do LED or compact-fluorescent (CFL) replacement lamps while still providing considerable energy savings and much longer life relative to legacy incandescent bulbs. <http://www.ledsmagazine.com>



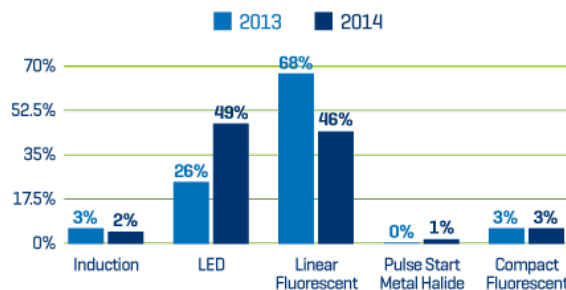
13. California Lighting Technology Center Case Study of Adaptive Corridor Lighting Systems - The California Lighting Technology Center has published a case study analyzing the performance of four adaptive control systems designed for corridor lighting. All four systems cut energy use and electricity costs by over 70%. Large-scale upgrades generally yield the best results, and they qualify for the biggest incentives. <http://cltc.ucdavis.edu/sites/default/files/files/publication/20130600-speed-business-case-adaptive-corridors.pdf>

14. New NanoMarkets Report Projects OLED Lighting Market to Hit Revenues of \$1.4 billion in 2019 - Industry analyst firm NanoMarkets has just published its latest forecasts of the OLED lighting market predicting a \$1.4 billion market opportunity in 2019. The report, “**OLED Lighting Markets-2014**” (Code Nano-721) notes that while the sector has foundered for the past few years it now appears to be worthy of some renewed optimism based on both improvements in OLED lighting panel performance and recent expansion of manufacturing facilities. Details of the report, including a table of contents and downloadable slides are available at http://www.nanomarkets.net/market_reports/report/oled-lighting-markets-2014

15. Philips and Green Sense Farms Harness LEDs for Horticulture - Royal Philips has announced a partnership with Green Sense Farms to develop massive indoor commercial farming installations that leverage LED lighting to maximize plant productivity. The companies believe that tuned solid-state lighting (SSL) can yield 20–25 harvests per year while using 85% less energy than indoor horticultural installations that use legacy lighting. <http://www.ledsmagazine.com>

16. Precision Paragon’s State of the Industry Survey - In December 2013, Precision Paragon conducted its 4th annual state of the lighting industry survey. This year’s survey was distributed to over 5,000 energy-efficient lighting industry professionals. The large majority of respondents believe the relighting market is growing. <http://www.lightnowblog.com/2014/05/precision-paragaons-state-of-the-industry-survey/>

What is the predominant light source you expect to install in your relighting projects in the coming years?



- 17. *Glowing Outside: Outdoor and Landscape Lighting by Susan Bloom*** - LEDs are among the biggest trends revolutionizing this growing market. Department of Energy statistics reveal that approximately 22 percent of all electricity generated in the United States is used for lighting, and about 10 percent of that is used to power outdoor lighting applications. It's a relatively small slice of the pie, but market activity is increasingly proving outdoor and landscape lighting to be a hotbed of activity and a great place to look for opportunities in improving lighting quality and lifespan while significantly reducing energy consumption, costs and maintenance concerns. <http://www.ecmag.com>
- 18. *Cree Launches 200-Lm/W, 1226-Lm Discrete LED for Directional SSL*** - Cree has announced the new XLamp XP-L LED family in a 3.45×3.45-mm package promising that what the company calls a member of its high-density grouping of LEDs will provide a drop-in upgrade for lighting products that use the prior XP-G/G2 LEDs. The new LEDs reach efficacy levels as high as 200 lm/W in cool white, at a modest 350 mA of drive current, while solid-state lighting (SSL) product designs can drive the LEDs at levels to 3A. Indeed, the maximum 10W LEDs are based on a discrete die and now far exceed what would conventionally be considered a high-power LED. <http://www.ledsmagazine.com>
- 19. *Cree About to Brighten the Commercial Office Environment with LED T-8 Replacement*** - Cree announced today the introduction of its linear LED lighting technology to replace the T-8 fluorescent tube. While not the first to market, Cree's technology delivers a 30 percent energy savings, and has the best color rendering index (CRI) in the industry, at 90. It also has nearly universal T-8 compatibility and is approved by the DesignLights Consortium (DLC). According to Cree, LEDs are superior to fluorescent lighting with respect to quality, energy efficiency, and longevity. Over 2.3 billion fluorescent sockets use 42% of all electricity consumed for lighting. A good number of these (1.1 billion) fit squarely within Cree's T-8 target market. 5/05 Forbes
- 20. *Industrial and Commercial LED Lighting Market - Global Industry Size, Market Share, Trends, Analysis and Forecast, 2013 – 2019*** - LED lighting delivers high efficiency, high level of brightness, long lifespan and high reliability. LED lights are manufactured using semiconductor components and emit less radiated heat as compared to other products such as incandescent and fluorescent. According to the U.S. Department of Energy (DOE), LEDs emit very less heat compared to incandescent bulbs (90%) and CFLs (80%). For more information please click on: http://www.researchandmarkets.com/publication/mgrjebi/industrial_and_commercial_led
- 21. *LED Rocks Retail*** - New products and systems promise an exciting world of possibilities and flexible design options. Retail lighting applications have many unique performance requirements that until now have mostly been met by incandescent sources for directional lighting, and fluorescent sources for ambient lighting. Only recently have LED sources evolved that meet and surpass traditional sources in performance. For retailers, LED lighting solutions must deliver high color consistency and color rendering, low maintenance costs, high directional output, high compatibility, and be available in a wide range of lamp types suitable for different layers of light typical to stores. <http://www.interiorsandsources.com/article-details/articleid/17457/title/leds-rock-retailing.aspx>
- 22. *How OLED Lighting Aims to Be the Star of the Glow*** - OLED is replacing the small, bright dots of LEDs with sheets of light that aren't so piercingly bright. That means they can illuminate subjects directly without reflectors, diffusers, and other apparatus needed to spread light and protect eyes from glare. <http://www.cnet.com/news/how-oled-lighting-aims-to-be-the-star-of-the-glow-q-a/>



National Energy Issues to Watch...

- 23. Expiration Deadline for 700 Series T8 Lamps Approaching** - In 2009, DOE issued energy standards for commercial general-service fluorescent lamps that took effect July 14, 2012 and eliminated a majority of 4-ft. linear and 2-ft. U-shaped T12 lamps and many 8-ft. T12 and T12HO lamps from the market. Lower-color-rendering (700 series) 4-ft. T8 lamps are covered and were expected to be eliminated, but DOE granted an exemption. LightNOW has confirmed with Philips, Halco, OSRAM SYLVANIA and GE that they have not applied for an extension of the exemption, as the rare earth crisis has largely abated. Unless manufacturers offer new products that satisfy the energy standards, a majority of these products will be removed from the market. <http://www.lightnowblog.com/2014/05/expiration-deadline-for-700-series-t8-lamps-approaching/>
- 24. NEMA Dismayed with Failure of Senate to Pass Tax Extender Legislation** - NEMA expressed dismay that the Senate was not able to find a bipartisan basis for passing needed tax-extender legislation, including a two-year extension of the Energy Efficient Commercial Buildings Tax Deduction (also known as Section 179D) as part of the *Expiring Provisions Improvement Reform and Efficiency (EXPIRE) Act*(S 2260). Previously passed on a bipartisan vote by the Senate Finance Committee, the legislation would have extended 55 tax provisions that expired at the end of 2013. The vote was 53 to 40 (60 votes were needed). <http://www.nema.org>
- 25. Light Sentry Oversees Your Home Lighting Needs** - Light Sentry is a newly-launched Kickstarter campaign by Sonne Industries. The main components include a central hub, a natural light sensor, and a gizmo (called a portable power gate) that acts as an intermediary between your connected light fixture and the hub. This hardware is designed to help you automate and *optimize* your home lighting schedules. <http://www.cnet.com/products/sonne-industries-light-sentry/>
- 26. Outdoor and Parking Lighting Systems by Navigant Research** - High-Pressure Sodium, Metal Halide, LED, Induction, and Fluorescent Lighting and Lighting Controls: Global Market Analysis and Forecasts. Outdoor lighting systems are a major contributor to global energy use. While LED lighting and controls are making inroads into commercial and domestic lighting, inexpensive high-pressure sodium (HPS) lamps lead in outdoor lighting and will take longer to displace. LED outdoor area luminaires must compete with the other lamp types that are still relatively energy efficient, making it more challenging to achieve lifetime cost savings in a market led by retrofits and replacements. <http://www.navigantresearch.com/research/outdoor-and-parking-lighting-systems>
- 27. MAJOR MILESTONES for ENERGY STAR Light Bulbs are Right Around the Corner** - The Lamps V1.0 specification released in August 2013 combines the Compact Fluorescent Lamp (CFL) and Integral LED Lamp specifications into a single, technology neutral specification. More than 400 light bulbs have already been certified to the new specification. The transition to the new specification will take place over several months. For any additional questions about the lamps transition process, email lighting@energystar.gov
- 28. Energy Star at Lightfair International (#7846)** - This year, EPA is also presenting an ENERGY STAR Lighting Certification Short Course workshop on June 2nd. <http://www.lightfair.com/lightfair/V40/index.cvn?id=10368>



- 29. ENERGY STAR Lighting Roadmapping Workshop** - Recognizing the unique nature of lighting products – their complexity, their rapid evolution, their global applicability, along with their historical performance issues - the U.S. EPA) and NEMA welcomed lighting stakeholders to a road mapping discussion on January 30, 2014. This workshop was intended to facilitate discussions and ongoing engagement regarding the near term future of the ENERGY STAR lighting program. In October 2014, the participants will reconvene to discuss the progress made and plans for future activities. <https://www.energystar.gov/products/specs/lightingroadmapping>
- 30. Lime Energy Completes 16,000 Small Business Energy Efficiency Upgrades** - Lime Energy Co. announced today that the company has successfully completed over 16,000 energy efficiency upgrades to small businesses through its innovative Small Business Direct Install (SBDI) model since 2010. These 16,000 projects have resulted in over \$40 million in annual energy savings for small business owners, while delivering over 400,000 megawatt-hours of energy efficiency to our utility clients. 5/02 BUSINESS WIRE
- 31. CLTC Case Study of Adaptive Corridor Lighting Systems** - The California Lighting Technology Center has published a case study analyzing the performance of four adaptive control systems designed for corridor lighting. All four systems cut energy use and electricity costs by over 70%. Large-scale upgrades generally yield the best results, and they qualify for the biggest incentives. <http://cltc.ucdavis.edu/sites/default/files/files/publication/20130600-speed-business-case-adaptive-corridors.pdf>
- 32. Lighting is a 'Gateway Drug to Energy Efficiency'** - Green Light New York aspires to be a “living room for energy efficiency,” that combines educational space with interactive mock-ups and creates a forum for learning and discourse. GLNY’s efficiency and lighting resource center is located in downtown Manhattan in a historic building on Chambers Street near City Hall and the federal courthouse, a location that provides great old-new juxtaposition with state-of-the-art lighting on display in an “ancient” New York City building. <http://theenergycollective.com/jared-anderson/386906/lighting-gateway-drug-energy-efficiency>
- 33. Top 100 U.S. Organizations Using Renewable Energy** - Tech leads the way in this year’s Top 100 organizations utilizing renewable energy sources, an annual list compiled by the EPA. The top 10 partners appearing on the Top 100 list are: <http://www.epa.gov/greenpower/toplists/>
1. Intel Corporation (Santa Clara, CA)
 2. Kohl’s Department Stores (Menomonee Falls, WI)
 3. Microsoft Corporation (Redmond, WA)
 4. Whole Foods Market (Austin, TX)
 5. Google Inc. (Mountain View, CA)
 6. Wal-Mart Stores, Inc. (Bentonville, AR)
 7. Staples (Framingham, MA)
 8. Apple Inc. (Cupertino, CA)
 9. City of Houston, Texas
 10. U.S. Department of Energy (Washington, D.C.)



State Energy Issues to Watch...

- 1. *DIA to Make Lights More Energy-Efficient*** - Denver International Airport is retrofitting more than 5,400 lights located in the airport's east and west parking garages with energy-efficient LED fixtures. The majority of the lights are being replaced with 51-watt LEDs. Combined with other lighting systems in the project, DIA expects a net energy savings of about 45 percent, resulting in energy cost savings of about \$327,000 per year. The project also qualifies for Xcel Energy's Lighting Efficiency rebate program. The LED light fixtures will be assembled locally by Denver-based Cooper Lighting. <http://www.9news.com/story/travel/2014/05/14/dia-energy-efficient-lights/9078933/>
- 34. *Consumers Energy Teams Up with Food Banks to Distribute 85,000 Energy-Efficient Light Bulbs to Michigan Families*** - This month, Feeding America West Michigan Food Bank is giving out about 40,000 ENERGY STAR®-qualified CFLs through its network of food pantries. Another 25,000 will be distributed through the Food Bank of South Central Michigan in Battle Creek during the week of May 26. The CFLs are distributed by EarthTronics www.earthtronics.com 5/12 PRNewswire
- 2. *Laredo, TX Tries Out LED Lighting*** - A pilot program with a goal of using electricity more efficiently by replacing street lights with LED has been in place since October 2013 in one area of Laredo due to an agreement between the city and AEP electric utility. Other cities that have reported savings in electricity by switching to LED technology include Los Angeles and Raleigh, N.C. Other cities like Las Vegas, Seattle and Austin are in the process of transitioning to this type of lighting. 4/28 Laredo Morning Times
- 3. *Oakland Will Upgrade 30,000 Street Lights With GE LED Fixtures*** - GE Lighting has announced that the city of Oakland, CA is in the process of retrofitting 30,000 street lights with GE Evolve LED Roadway Scalable Cobrahead fixtures. The city is converting HPS lights that range from 70–400W along the breadth of the city's roadways with the GE product family that offers models that can deliver a variety of lumen packages, as the scalable name implies. <http://www.ledsmagazine.com>



- 4. *Why a Honolulu City Council Restored Funding for LED Street Lights*** - the City and County of Honolulu plans to replace all 51,700 of Oahu's city-owned street lights with LED lights that will save the City \$3 million a year in energy and maintenance costs. Installation of the new lights will be privately funded through a private-public partnership without investment of taxpayer funds. <http://www.civilbeat.com/2014/05/honolulu-city-council-restored-funding-led-street-lights/>

