

EnergyWatch



June 2018

<http://attardimarketing.com/>
<http://energywatchnews.com/>

Accept certain inalienable truths: Prices will rise. Politicians will philander. You, too, will get old. And when you do, you'll fantasize that when you were young, prices were reasonable, politicians were noble, and children respected their elders. Kurt Vonnegut

Plan for the future, because that is where you are going to spend the rest of your life. Mark Twain

Printers are educated in the belief that when men differ in opinion, both sides ought equally to have the advantage of being heard by the public; and that when Truth and Error have fair play, the former is always an overmatch for the latter. Benjamin Franklin

Something to Think About... The 10 Big Lighting Trends for 2018 -

Lighting is changing, and the next 12 months will be a defining period in the sector as we move away from an energy-saving offer to fully embrace all things digital. The big themes of digital disruption and uncertainty will continue into next year, but there'll be lots of micro trends from human-centric lighting to Li-Fi. Here's how Lux sees the big trends to watch for in 2018:

- **Luminaires will boast more functionality**
- **Controls will leave the cupboard**
- **Emergency lighting standards will be driven up**
- **Li-Fi will begin to get adopted**
- **Lighting will join the connected office**
- **Bluetooth will win the protocol war**
- **Human-centric lighting will get serious**
- **Lighting pollution will be a major issue**
- **The WELL Building standard will be big**
- **The industry will be driven by consolidation and partnerships**

<http://luxreview.com/article/2017/12/10-big-lighting-trends-for-2018>

So what do you think? If you are so inclined, we would very much like to hear what YOUR prediction for the coming year is? Stick your neck out, agree or disagree, in our comments box at: <https://energywatchnews.com/the-10-big-lighting-trends-for-2018/>



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National LED Energy Watch...

1. ***Energy Department Announces Up to \$15 Million for Early-Stage Solid-State Lighting Research*** - The U.S. Department of Energy (DOE) announced up to \$15 million to conduct early-stage, innovative research to drive further breakthroughs in solid-state lighting (SSL) technology. This funding will accelerate the development of high-quality light-emitting diode (LED) and organic light-emitting diode (OLED) products with the potential to reduce lighting energy costs for American families and businesses and to enhance U.S. global competitiveness. For more information, application requirements, and instructions for applying to this funding opportunity, visit <https://eere-exchange.energy.gov/default.aspx#FoaIdb9afac73-0500-4ec6-9a22-ae5adeaa1652>
2. ***DOE LED Lighting Facts Program Concludes*** - The LED Lighting Facts® program has played a pivotal role in the early adoption of Solid-State Lighting (SSL) technology and products. After nearly a decade, the program has achieved its original objectives with significant success, and is scheduled to end. The closure of the LED Lighting Facts program will occur in phases. As of March 1, 2018, products are no longer being added to the database. The website will close down on June 1, 2018, and until then will remain accessible for use of account-level tools and database searches. The closure of DOE's program DOES NOT affect the existing consumer Lighting Facts labels required by FTC rules. Those rules require the FTC labels to appear on packages for general service lamps and specialty consumer lamps. <https://www.energy.gov/eere/ssl/led-lighting-facts>
3. ***Lighting Facts Revived After DoE Cancellation*** - On April 30, 2018, the U.S. Department of Energy (DoE) announced its LED Lighting Facts program would be discontinued, with the website shutting down June 1. LED Lighting Facts will resume acceptance of LED lighting products today, under the direction of D+R International, the implementer of the program since its inception. D+R will continue the program, which won't have the DoE affiliation anymore but otherwise should be seamless as a user experience. Current product listings will be free for manufacturers through May, but in June, a subscription pricing model will be introduced. <http://www.lightnowblog.com/>
4. ***Lowe's and GE Lighting Expand Partnership to Differentiate Light Bulb Offering*** - To help customers easily find the right light bulb for their home while also saving energy and money. As a part of this expanded partnership, Lowe's will become the only nationwide home center to offer industry-leading GE light bulbs. Additionally, GE Lighting will become the only nationwide supplier to Lowe's U.S. consumer retail outlets for light bulbs, including GE's popular, proprietary light bulb line, reveal. The new light bulb aisle at Lowe's simplifies the customer selection process by clearly showcasing a wide range of options at various price points so customers can quickly compare and choose a bulb that best meets their needs. GE's packaging will also be color coordinated to reflect color temperatures – warm yellow for soft white and cooler blue for daylight. Half of the selection will be dedicated to LED solutions. <https://www.ledinside.com>
5. ***The Acuity Acquisition of IOTA*** - Acuity Brands has announced the acquisition of IOTA Engineering, a specialist in emergency lighting technology such as LED drivers with emergency lighting capabilities. The acquisition likely fills a void in the former's portfolio, although Acuity has long offered the Power Sentry emergency product line. Still, Acuity said IOTA's products are a good match for the increasingly connected lighting world and Internet of Things (IoT) technology that Acuity is aggressively pursuing. <https://www.acuitybrands.com/>



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6. **2018 LFI Innovation Awards** - This prestigious event honors industry innovations for lighting-related products and designs introduced in the past 12 months. Each product was judged by an independent panel of renowned lighting professionals. Categories and companies within the categories are listed in alphabetical order; this is no indication of ranking. Congratulations to all the 2018 winners! <https://lia.lightfair.com/#!/home>
7. **Stars of the Show at LightFair** - One of the highlights each year at Lightfair is the Product Innovation Awards. Lighting manufacturers submit their new products for review by a board of lighting designers and other industry professionals. While well-known brands like Zumtobel Lighting, Philips/Gardco, and Acuity were winners, some very small companies not quite on the industry radar were category winners, too. Winners of the four major awards in the LightFair International Innovation Awards 2018 were as follows: <http://www.ecmweb.com/>
- 1) **Product Innovation Award Winner - Ledra Brands: Vector lighting fixture**
 - 2) **Technical Innovation Award Winner - Crestron Electronics: CCT & Lux Sensor (GLS-LCCT)**
 - 3) **Design Excellence Award - Acuity Brands: FlexConnect**
 - 4) **Judges' Citation Award - Lumefficient: Resilient**
8. **EdisonReport's 2018 Top 10 MUST SEE List** - Our Top 10 lists focuses on revolutionary products that will be viable in the marketplace. The one recurring theme is that these products will help bring badly-needed profitability back to our industry. <https://edisonreport.com/edisonreports-2018-top-10-must-see-list/>
- 1) **Acuity Brands, Atrius Enabled Luminaires**
 - 2) **Cree, Arcadia**
 - 3) **Eulum, ARCANÉ**
 - 4) **Hubbell Control Solutions, NX Distributed Intelligence**
 - 5) **LEDRA/Alphabet NU4RD**
 - 6) **Lunera, Lunera Smart Lamp Platform**
 - 7) **Nichia, Optisolis**
 - 8) **OLEDWorks, Brite 3 FL300**
 - 9) **Seoul Semi, Sunlike**
 - 10) **Soraa, ARC Adjustable Luminaire**
9. **Lightfair 2018: Mike Eby's Product Picks — Part 1 / 2 / 3** - Mike Eby, senior director of content and all-around electrical industry expert, is scouting Chicago's McCormick Place to track down this year's latest and greatest product offerings. This photo gallery showcases the top 10 Lightfair product offerings that caught Mike's attention each day. <http://www.ecmweb.com/>
10. **2018 IALD AWARD WINNERS (35TH ANNUAL)** - Luminaries of the lighting profession gathered at Chicago's trendy Revel Fulton Market on 9 May to honor the winners of the 35th Annual International Association of Lighting Designers (IALD) International Lighting Design Awards. Seventeen projects from eleven countries were on display – including interiors, workspaces, museums, hospitality sites, and a place of worship. Out of these 17 projects, 13 featured IALD members on the lighting design team. Congratulations to all of the winners for their achievements! <https://www.iald.org/awards>



- 11. 2018 ENERGY STAR Products Partner Meeting Update** - EPA is pleased to provide you with the following updates for the 2018 ENERGY STAR Products Partner Meeting, which will be held **September 5 – 7, 2018 in Phoenix, AZ.**
1. **New! [PRELIMINARY MEETING AGENDA](#)**
 2. **New! [CO-SPONSORSHIP & EVENING EVENTS](#)**
 3. **New! [MEETING REGISTRATION](#)**
 4. **New! [ENERGY STAR EXPO](#)**
 5. **[LOCATION AND HOTEL ACCOMMODATIONS](#)**
 6. **[ADDITIONAL INFORMATION](#)**
- 12. DOE LIGHTFAIR Presentations Available Online** - The U.S. Department of Energy once again hosted its award-winning informational booth and free educational sessions at LIGHTFAIR® International, held May 8–10 in Chicago. Attendees got the latest scoop on SSL's most challenging topics and had the opportunity to attend the free educational sessions. The sessions were popular among attendees looking for expert Q&A on today's hottest and toughest lighting issues. In case you missed any of those sessions, the presentations are now posted online.
<https://www.energy.gov/eere/ssl/articles/us-department-energy-presentations-lightfair-international-2018>
- 13. SSL Continuous Disinfection Technology Expands Universe at Lightfair International** - Hubbell Lighting has announced that it signed a licensing agreement with the University of Strathclyde for access to the Glasgow, Scotland school's continuous disinfection technology and the company demonstrated an early-stage prototype of a light engine at LightFair International (LFI). Current, powered by GE has also announced continuous disinfection technology based on emission in the ultraviolet (UV) range just below the visible spectrum, and said it developed the intellectual property (IP) in house. The concept of continuous disinfection is a compelling one with pathogens lurking in spaces ranging from athletic locker rooms to food and beverage operations to healthcare-centric facilities — and more. <http://www.ledsmagazine.com/>
- 14. Have Lighting Prices Hit a Turning Point?** - America's biggest fixture manufacturer has surprised the global lighting industry with the first major price rise in the market in years. Acuity Brands – parent of top brands in both North America and Europe including Lithonia, Winona, Holophane, Hydrel, Carandini, Gotham, Indy, Peerless and eldoLED – has announced that it is putting up its prices in the US for all traditional lighting technologies and many LED products by 6 per cent from Monday 11 June. The move is highly significant as Acuity – with annual sales of over \$3.5 billion is seen as a sector leader and many independent light makers are expected to take their cue from the company. <http://luxreview.com/article/2018/05/have-lighting-prices-hit-a-turning-point->
- 15. Now Eaton Follows Suit with 6% Increase** - The prospect of industry-wide price rises grew significantly this week with the announcement by Eaton that it is following Acuity Brands' lead by putting up the cost of its luminaires by 6 per cent. Vice president of sales Joe Melchior wrote to distributors and agents informing them that due to 'increases in the cost of metals, commodities, freight and other logistical components', the company is implementing a general price increase on both legacy technology products and selected LED and controls equipment. Rises will vary by product category with an average of 6 per cent, but luminaires with a 'heavy metals composition' may see higher than average increases. The new list prices become effective on Monday 16 July.



- 16. Deco Lighting and Molex Collaborate on IoT and POE-Ready LED Lighting** - Molex of Lisle, Illinois announced the addition of Deco Lighting's PoE-Ready Vector 2 LED light fixtures to its design portfolio of Molex PoE-Ready products. The new fixtures are part of the collaboration between the two companies. Molex says that its capabilities in IoT/PoE network connected solutions combined with Deco Lighting's portfolio of architectural fixtures will help accelerate adoption and broaden the IoT/PoE market. Deco Lighting, a firm based in Commerce, California, is also a member of Molex's Alliance of lighting firms working together to expand the options for network connected lighting in commercial buildings. Deco Lighting intends to develop other POE-Ready fixtures in addition to the Vector 2 line. <http://www.solidstatelightingdesign.com/>
- 17. Focal Point and Legrand Work Together to Deliver Smart Building Solutions** - Focal Point, LLC and Legrand North America are collaborating to deliver smarter lighting solutions for commercial spaces. Integrating Legrand's Wattstopper Digital Lighting Management (DLM) system into a broad range of Focal Point luminaires as part of its Connected Solutions program allows for easy, code-compliant lighting right out of the box. This integration enables features like luminaire-level lighting control, on/off and dimming functionality, occupancy sensing, multi-zone daylight harvesting, and power metering (when enabled by additional DLM hardware). <http://lightingcontrolsassociation.org/>
- 18. IES Annual Conference 2018 - Final Call for Papers & Posters** - The IES Annual Conference is August 9-11, 2018 in Boston, Massachusetts at the Westin Boston Waterfront Hotel. The objective of the conference is to provide educational sessions and experiences relevant to the audience of lighting professionals, academics, and peripheral design disciplines. This year's theme is "light.balance" bringing focus to the enabling technologies of light and the benefits, risks or problems associated with available and evolving technologies. <https://www.ies.org/ac>
- 19. Industry Unveils First IoT Lighting Standard** - Dubbed 'Specification V1', the standard has been unveiled by the industry group, the IoT-Ready Alliance. It's hoped that the first agreed standard will provide a boost to the growing IoT lighting sector. It defines a socket that allows any type of Internet of Things (IoT) sensor or control module to connect seamlessly to a luminaire or other building system. The standard is network-protocol independent, which enables IoT-compliant products to use any networking protocol, either wired or wireless and is suitable for all LED lighting and building control networks. <http://luxreview.com/article/2018/05/first-iot-lighting-standard-is-unveiled>
- 20. SnapCount and Selling Energy Partnership Improves Wins for Retrofit Industry** - SnapCount

2 EMPOWERING SALES PLATFORMS.
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retrofit software and Selling Energy have announced a partnership enabling SnapCount customers to integrate Selling Energy's award-winning sales training within the SnapCount platform. Since 2011, Mark Jewell and the Selling Energy team have revolutionized the way energy efficiency programs are sold, coupling in-person and online training programs with segment-specific market research to help thousands of professionals sell more effectively. The integration of the Selling Energy

and SnapCount platforms will enable users to experience the best of digital energy project development and award-winning sales training in the convenience of one platform. The integration of the two platforms will be complete later in the summer; however, clients of either company can begin leveraging the additional benefits generated by the partnership prior to final release.



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- 21. PoE Lighting and Control by Hubbell Control Solutions** - PowerHUBB is an enterprise-level PoE lighting and control platform that integrates luminaires, sensors, user interfaces and software for a scalable intelligent building control solution. The advantage of a PoE solution is its ability to simplify lighting and control installations by reducing the time, specialized resources and materials needed when compared to traditional line voltage installations. Commercial building owners are increasingly enlisting the support of actionable intelligence for energy management and better building performance. Analytics, the process of turning data into actionable information, can have a significant impact on sustainability and cost-saving strategies. PowerHUBB can be scaled from basic lighting control to advanced cloud-based analytics, establishing it as a cost-effective solution for smart building deployments that demand an immediate return on the investment. <https://www.facilitiesnet.com/buildingproducts/details/PoE-Lighting-and-Control--9661>
- 22. RESEARCH: Knowledge Gap About Lighting Terms and Biological Effects Remains** - LEDVance, reported the results its North American lighting survey. Research Now conducted the representative survey on behalf of LEDVance. The survey got responses from over 3000 people in North America about current and future lighting technology. The survey results point to a significant knowledge gap about lighting technology. The release of the survey results corresponds with UNESCO declaration that May 16th is the International Day of Light. The survey sought to answer questions about what consumers know about lighting technologies and what do they only “think” they know about technical terms (such as lumens and Kelvins) and the biological effects of light and artificial light. <http://www.solidstatelightingdesign.com>
- 23. WHITEPAPER: Minimize Risk and Maximize Building Performance** - Today's building owners and facility managers are focusing on adding value in every aspect of building performance — increased energy savings, improved operations, and an enhanced working environment for employees. Electrical contractors are increasingly challenged to provide the solutions that make buildings smarter and improve productivity. In [this guide](#) learn about the advantages of wireless light control and why contractors and specifiers are utilizing this innovative solution to stay competitive, maintain profitability, and exceed client’s expectations. <http://www.ecmweb.com/>
- 24. Siemens Drives Digital Transformation in Buildings with Acquisition of Enlighted Siemens** - Building Technologies Division is acquiring Enlighted Inc., a leading provider of smart IoT (Internet of Things) systems in buildings, headquartered in the Silicon Valley. The company is a successful player in the smart building industry, bringing an advanced digital sensory system to market. Both parties have agreed not to disclose financial details. Closing is expected in the third quarter of 2018. Enlighted will be managed as an independent legal entity and wholly-owned subsidiary of Siemens Industry, Inc. The interaction between buildings and humans is crucial to increase productivity, energy efficiency and comfort in a building. www.siemens.com/buildingtechnologies
- 25. An Offer You Can’t Refuse by Susan Bloom** - Following, industry experts Bill Attardi (an over 50-year industry veteran and owner of NJ-based [Attardi Marketing](#)), Jay Goodman (a 25+-year industry veteran and principal of PA-based consultancy [Goodman & Company](#)), and Rob Haslehurst (managing director at the Boston-based location of [L.E.K. Consulting](#), a 30+-year-old strategy consulting firm specializing in the industrial, building products, retail, and consumer sectors) speculate on the future of independents and whether this recent acquisition portends more of the same in the future. <https://tedmag.com/an-offer-you-cant-refuse/>



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- 26. Blackbaud World Headquarters Showcases the Future of Intelligent Lighting for Commercial Offices** - As [Blackbaud Inc.](#), the world's leading cloud software company powering social good, prepares to turn on the lights and welcome employees to its new 172,000 square foot world headquarters, an innovative lighting platform from [Current, powered by GE](#) will enable dynamic IoT business applications for the future. As the largest technology company headquartered in Charleston, SC, Blackbaud is creating an infrastructure that will deliver 80 percent lighting energy savings as compared to fluorescent and add sensor technology that will improve office productivity by making the space responsive to human and environmental factors. Together with [JLL](#) commercial real estate management, Current by GE engineered a portfolio of LED fixtures to present a sophisticated look for the eco-friendly campus, along with its Daintree* wireless control system that provides daylight harvesting capabilities by using natural light to offset electricity use. <https://www.businesswire.com/>
- 27. Lighting Science Launches Bedside Lamps That Promote Healthy Sleep Patterns** Lighting Science®, the LED lighting company that previously introduced the GoodDay® and GoodNight® A19 bulbs and that utilize the latest research about circadian neuroscience, launched a new line of consumer lamps. These new lamps employ the company's proprietary sleep spectrum technology to create a calming, sleep-promoting environment for both adults and children. The GoodNight® lamp minimizes blue-light spectrum, which is known to disrupt sleep. The company claims that the GoodNight lamp delivers a pleasant, warm light with high color rendering in a modern fixture. <http://www.solidstatelightingdesign.com/>
- 28. Beyond the Ceiling: Healthy Lighting for Hospitals by Craig DiLouie** - Lighting systems have historically been designed for visual performance and comfort, but science tells us light plays a major role in synchronizing the human circadian system. The growing understanding of the relationship between light and circadian health is giving rise to a new lighting trend: circadian lighting. Hospitals present a particularly interesting application. This is an environment specifically designed to promote health where managers are concerned both with the well-being of workers and their patients. The 2012 Commercial Building Energy Consumption Study, conducted by the U.S. Department of Energy, estimated there were 10,000 inpatient healthcare buildings in the United States, representing about 2.4 billion square feet. <https://www.ecmag.com/section/lighting/beyond-ceiling-healthy-lighting-hospitals>
- 29. International Consumer Study: What Do Consumers Know About Light?** - Do you know how much consumers know about lighting? Answers can be found in an international online study by LEDVANCE, which was conducted in nine countries. The representative survey commissioned by LEDVANCE and conducted by "Research Now" includes a questionnaire of 25 questions and shows that there are still major gaps in knowledge on many topics relating to current and future lighting technologies. All in all, there are more similarities than differences between the single countries. When buying lighting products, LEDs are mostly looked for in all countries. Especially younger consumers are interested in smart LEDs. In general, younger consumers, consumers with higher income and education are more open and interested in new technologies, hence they are more interested in LEDs and smart lighting. Compared to traditional lighting products, LEDs do well in all countries. <https://www.ledvance.com/news-and-stories/stories/international-consumer-study/index.jsp>



Global LED EnergyWatch...

30. *Global LED Indoor Commercial Lighting Market Will Reach USD 15.87 Billion in 2018 -*

According to the latest report from LEDinside, a division of the market research firm TrendForce, 2018 Commercial Lighting, Smart Lighting and Panel Light Market Report, the global LED indoor commercial lighting market will reach USD 15.87 billion in 2018, accounting for 42% of the global LED lighting production value, moreover, the global LED commercial lighting is estimated to achieve CAGR of 3% during 2018-2021, growing slower than previous years, mainly resulting from the price decrease of LED lighting products and the reduction in market installation. According to LEDinside, the top ten commercial lighting manufacturers contain **Philips Lighting, Acuity Brands, Panasonic, LEDVANCE, Eaton Lighting, Toshiba, NVC, Fagerhult, YANKON and Hubbell**. <https://www.ledinside.com>

31. *Osram Cuts Earnings and Sales Forecast -* The elephant came to the front of the IoT lighting room, as Osram warned that fiscal year 2018 revenue will grow only about half as much as previously forecast, hitting earnings and forcing layoffs that the company hopes to eventually reverse by recasting its workforce into a more high-tech gearing. The world's second-largest lighting company said that revenue for the year that ends Sept. 30 will now increase by 3–5%, down from its earlier guidance of 5.5–7.5%, based on current exchange rates. It lowered its forecast for adjusted EBITDA by around 9%, to about US\$779.4 million from \$852.4 million. The downward adjustment was a reminder that the lighting industry's attempt to transform itself from an illumination provider into an industry that establishes the lighting infrastructure as the backbone to data communications networks — making lights indispensable “things” within the Internet of Things — will not come easy. <http://www.ledsmagazine.com/articles/2018/04/osram-cuts-earnings-and-sales-forecast.html>

32. *Osram Partners with Nokia for Indoor 5G Through the Lights -* Two of the biggest names from the lighting and cellular networking industries — Osram and Nokia — are together exploring the possibility of equipping LED ceiling luminaires with 5G radio chips to transmit data inside commercial building. In an early-stage development project, Osram said it is providing luminaires and its knowledge of building services, and Nokia Bell Labs is providing networking expertise, to test the lighting infrastructure as a possible means to boost and transmit 5G signals indoors. The wireless transmission would connect to an end user's wired backhaul to offer complete Internet service. 5G, generally expected around 2020, marks the next big leap in mobile networking speeds and bandwidth. <http://www.ledsmagazine.com/>

33. *Sales and Earnings Decline at Philips -* Philips Lighting reported a 16.5% drop in adjusted first quarter earnings and 67% plunge in net income on an 11.2% sales decline, delivering the industry's second reminder this week that lighting's biggest ever transformation ever is no free ride. No matter which measure you prefer, the drop came two days after the world's second largest lighting company, Osram, cut its 2018 sales and earnings forecast. Both companies, and the industry as a whole, are undergoing a major shift from selling conventional lighting to providing Internet-connected LED lighting systems that give users greater control and that turn lighting systems into data collection networks. But Philips and the industry are struggling with the costs associated with the transformation, and with finding the right business model, which many people believe will entail selling lighting as a service as well as monetizing the data gathered by the intelligent systems. <http://www.ledsmagazine.com/>



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- 34. Halogen and CFLs to be banned in Europe** - A minimum efficiency requirement of 85 lumens per watt and a maximum standby power of 0.5W on all light sources is set to come into force as part of a review of the Ecodesign laws. As standard tungsten halogen lamps have an efficiency of around 25 lm/W while compact fluorescent lamps with ballasts can reach just 60 lm/W, both technologies will be outlawed by the new regulations. The Ecodesign laws are commonly known as the 'Bulb Ban', the phasing out of inefficient light sources in the European Union. The draft of the new regulations also propose a return to the days of lighting fixtures with replaceable lamps. Under the current wording, luminaire makers will have to make the light source removable and replaceable from the fitting by September 2020. <http://luxreview.com/article/2018/04/halogen-and-cfls-to-be-banned-in-europe>
- 35. LG Acquires Global Premium Automotive Lighting Company ZKW Group** - The Board of Directors of LG Electronics approved the acquisition of leading automotive lighting and headlight systems provider ZKW Group, Wieselburg, Austria, capping a deal worth more than EUR 1.1 billion, LG's largest acquisition to date. Under the terms of the transaction, LG Electronics will acquire a 70 percent stake in ZKW Group with parent company LG Corp. purchasing the remaining 30 percent. The strategic merger is expected to result in synergies that allow the combined companies to lead the global lighting sector in autonomous vehicle components. The global automotive lighting market is expected to grow from USD 24.5 billion last year to USD 29 billion by 2020. <https://www.ledinside.com>
- 36. 7 Chinese Companies That Might Be Interested in Bidding for GE Lighting** - GE's general lighting unit and Current, powered by GE are worth around USD 600-800 million, financial institutions estimate. The final price will settle based on the term of GE's trademark and its market coverage. Currently, there are six GE lighting plants. LEDinside <https://www.ledinside.com/> looked into the Chinese lighting industry and found out a few firms that might be interested in buying GE's assets.
- 1) **Shanghai Felio Acoustics Co., Ltd.**
 - 2) **Topstar**
 - 3) **Yankon**
 - 4) **San'an Optoelectronics**
 - 5) **MLS Co.**
 - 6) **GSR Ventures**
 - 7) **IDG Capital**
- 37. Micro-LED Display Market Expected to Take Off Beginning in 2019, According to Research and Markets** - The micro-LED display market is expected to take off at an amazing rate over the next six years, according to a forecast from Research and Markets. According to the firm, portions of the market will come from their use in smartwatches, NTE devices including augmented and virtual reality, smartphones, TVs, humanitarian use devices (HUDs), digital signage, laptops, and monitors, as well as general and automotive lighting. Research and Markets projects that the micro-LED display market could quickly grow from USD 0.60 billion in 2019 to USD 20.50 billion by 2025, at a CAGR of 80.1% between 2019 and 2025. The firm asserts that the driving force behind this giant jump in demand will come from the increasing desire for brighter and more power-efficient display panels for smartwatches, mobile devices, and NTE (AR/VR) devices. Consumer electronics firms, Apple, Samsung, and Sony have demonstrated their rising interest in micro-LED display technology. <https://www.researchandmarkets.com/>



- 38. Forget Lighting, This Li-Fi Is for Outdoor Data Communications Only** - Germany's Fraunhofer Heinrich Hertz Institute (HHI) has turned the concept of lighting on its head, developing a Li-Fi transmission box called the LED Backhaul in which the light waves have nothing to do with illumination, but everything to do with data communications. Fraunhofer HHI was so uninterested in illumination with its new optical transmitter that it decided to use infrared light, which, as part of the non-visible spectrum, is useless for general illumination. But the Berlin-based group deemed the technology as a handy and affordable way for slinging data back and forth between outdoor facilities up to 200 m apart, and is positioning it as a part of future 5G communication schemes. It has teamed with Japanese telecommunications company Sangikyo. <http://www.ledsmagazine.com/>
- 39. Osram Invests in Growth of Horticultural Lighting with Acquisition of Fluence Bioengineering** - Horticultural lighting is one of the most vibrant markets for both research and development and new applications. Lighting giant Osram, Munich, Germany (with its U.S. facilities based in Wilmington, MA) took a big next step in its quest to become the leading provider of intelligent plant growth lighting by acquiring Fluence Bioengineering, Inc. of Austin, TX. Terms of the deal were not disclosed. <http://www.electricalmarketing.com/>
- 40. Zumtobel and Austrian Energy Utility Gear Up Their Lighting-As-A-Service Alliance** - While the lighting industry is indeed busy seeking partnerships with information technology firms to help chase the Internet of Things (IoT), Zumtobel Group has served a reminder that another industry — energy — can also provide synergies worthy of alliances, as it has ratcheted up its lighting-as-a-service collaboration with an Austrian energy utility. lighting company Zumtobel replaced existing metal-halide lights with 400 new LED models across eight product halls covering around 81,000 ft². AGN is not purchasing the lights but is paying a monthly service fee in an arrangement that doubles the lighting levels to between 200 and 400 lx, and which is expected to save 40% on energy bills. <https://www.ledsmagazine.com/>
- 41. We Picked Raspberries in January Thanks to LEDs** - The crop was planted in November and, under a mixture of red and blue LEDs, grew big leaves 'as quickly as in summer'. They were pollinated by bumble and honey bees and the fruit was picked on 31 January 2018. The trial – which used the summer variety Tulameen (*rubus idaeus*) – took place in a climate-controlled greenhouse. A parallel planting of blackberries, which began on 20 November 2017, exhibited flower buds in January with pollination by bees and full cropping on 27 February this year. It's hoped that the research will help Dutch growers to have year-round production. <http://luxreview.com/article/2018/05/-we-picked-raspberries-in-january-thanks-to-leds>
- 42. Signify- 900th Member Milestone for EnabLED Licensing Program** - Signify (Euronext: LIGHT), announced that it has reached the 900th member milestone for its EnabLED Licensing Program for LED luminaires and retrofit bulbs in May. This latest milestone underlines the company's commitment to research and development and innovation in the latest energy efficient LED technologies. The 100 new members in 10 months are a good reflection of the total LED market as they represent all LED application areas and come from small- and medium-sized companies, as well as large multinationals. The new members serve various markets such as consumer, industrial, retail, street lighting and retrofit bulbs. In addition to mainstream markets, new members are also active in a wide range of niche markets. <https://www.signify.com/>



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LED Technology Watch...

- 43. Alphabet Lighting Awarded LFI's Most Innovative Product of the Year** - This award recognizes the best new product. This year's award went to the NU Vector Series downlight by Alphabet Lighting, a division of LEDRABrands. This downlight offers dynamic beam shaping, full tilting, and full wireless control via an app or wall control.
<https://alphabetlighting.com/products.html?trim=286>



- 44. 2018 LFI Innovation Awards** - This prestigious event honors industry innovations for lighting-related products and designs introduced in the past 12 months. Each product was judged by an independent panel of renowned lighting professionals. Categories and companies within the categories are listed in alphabetical order; this is no indication of ranking. Congratulations to all the 2018 winners! <https://lia.lightfair.com/#!/home>

- 45. EarthTronics Highbay LED HBL2200040, HBL2200050** - Delivers excellent energy savings compared to similar linear fluorescent and HID fixtures. This 162 watt fixture has a 24" design and produces 21,222 lumens which is suitable for 15-36' mounting heights. It features 4000K and 5000K color temperature with a high 80+ CRI providing excellent visual acuity for accuracy when working in manufacturing and warehousing applications. The durable white finish metal body provides excellent heat dissipation providing 90,000 hours (L80 TM-21 at 68°C) of service life. 50,000 hour DLC warranty life. Sensors are available. 6' SJT



whip, V-Hooks and chain included. Wire guards and pendant mount kits available.

<https://www.earthtronics.com/products-page/led-highbay/21222-lumens-162-watt-led-highbay/>

- 46. Nifty Nostalgia: GE 5W Vintage Style LED Light Bulb** - "Vintage-style" LED light bulbs are bringing an old-time aesthetic back to the lighting aisle. Inside each one, you'll find decorative filaments that are actually just light-emitting diodes (LEDs) arranged into lines. They look like old-fashioned incandescent bulbs with twisty, eye-catching filaments when you turn them on, but they only use a fraction of the wattage. The latest among these lighting lookalikes is a new line of vintage-style bulbs from GE. Available in a variety of shapes, each one features sepia-tinted glass and a fake filament twisted into an artsy spiral. None of them is bright enough to serve as a primary light source on its own -- instead, they're designed to serve as retro accent lights for exposed bulb fixtures. Prices start at about \$10 each.



<https://www.gelighting.com/led-bulbs/vintage-light-bulbs>



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Monthly Special Feature...*Lamps Sales Last Seven Years by Category*

Very interesting... draw your own conclusions:

<u>millions</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
T12							
Units	61	67	79	74	37	25	19
Dollars	99	130	140	155	97	60	37
AUP	\$ 1.62	\$ 1.94	\$ 1.77	\$ 2.09	\$ 2.62	\$ 2.40	\$ 1.95

T8							
Units	272	230	245	230	190	165	130
Dollars	370	400	395	350	290	225	165
AUP	\$ 1.36	\$ 1.74	\$ 1.61	\$ 1.52	\$ 1.53	\$ 1.36	\$ 1.27

T5							
Units	37	34	37	34	30	25	19
Dollars	124	122	125	110	95	65	42
AUP	\$ 3.35	\$ 3.59	\$ 3.38	\$ 3.24	\$ 3.17	\$ 2.60	\$ 2.21

<u>dollars</u> <u>millions</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
LED	137	338	600	1100	1700	2000	1900
Fluorescent	789	819	815	740	630	480	365
CFL	589	659	660	610	460	240	145
Halogen	273	274	350	475	480	405	305
Incandescent	578	505	480	375	320	300	245
HID	<u>355</u>	<u>336</u>	<u>315</u>	<u>280</u>	<u>245</u>	<u>200</u>	<u>150</u>
Total	\$2,721	\$2,931	\$3,220	\$3,580	\$3,835	\$3,625	\$3,110

<u>units millions</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
Incandescent	1316	1130	1030	690	480	465	385
Fluorescent	476	400	405	385	330	280	230
CFL	242	410	360	355	250	131	90
Halogen	121	127	186	360	400	385	300
LED	11	23	40	105	290	540	600
HID	<u>29</u>	<u>27</u>	<u>26</u>	<u>23</u>	<u>21</u>	<u>18</u>	<u>15</u>
Total	2195	2117	2047	1918	1771	1819	1620



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