

December 2013

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

#### Merry Christmas Everybody



Love is patient, love is kind. It does not envy, it does not boast, it is not proud. It is not rude, it is not self-seeking, it is not easily angered, it keeps no record of wrongs. Love does not delight in evil but rejoices with the truth. It always protects, always trusts, always hopes, and always perseveres.

~ 1 Corinthians 13:4-7 ~

# Something to Think About... Words to Live By - Mother Teresa

- People are often unreasonable, illogical, and self-centered; Forgive them anyway.
- ☐ If you are kind, people may accuse you of selfish, ulterior motives; Be kind anyway.
- ☐ If you are successful, you will win some false friends and some true enemies; Succeed anyway.
- ☐ If you are honest and frank, people may cheat you; Be honest and frank anyway.
- ☼ What you spend years building, someone could destroy overnight; Build anyway.
- ☐ If you find serenity and happiness, they may be jealous; Be happy anyway.
- The good you do today, people will often forget tomorrow; Do good anyway.
- Give the world the best you have, and it may never be enough; Give the world the best you've got anyway
- You see, in the final analysis, it is between you and God; It never was between you and THEM anyway.



### LED Issues to Watch...

- 1. Status of the LED Industry 2013 Growth of the LED industry has come initially from the small display application and has been driven forward by the LCD display application. In 2012, General Lighting has surpassed all other applications, representing nearly 39% of total revenue of packaged LEDs. Indeed, the LED TV crisis of 2011 (following an overestimation of the market) had the benefit of decreasing LED prices and intensifying the competitive environment. As a matter of fact, LED-based lighting product prices have decreased more rapidly than expected, increasing the penetration rate of the technology. Yole Développement estimates packaged LED will reach a market size of \$13.9B in 2013 and will peak to \$16B by 2018. Growth will be driven mainly by General Lighting applications (45% to 65% of total revenue during this period), completed by display applications. <a href="http://www.researchandmarkets.com/publication/m9qh8qc/status">http://www.researchandmarkets.com/publication/m9qh8qc/status</a> of the led industry 2013
- 2. DOE Publishes New Pricing and Efficacy Trend Analysis for Utility Program Planning The U.S. Department of Energy (DOE) has published a new report, SSL Pricing and Efficacy Trend Analysis for Utility Program Planning. The report was created in response to requests from utilities and energy efficiency organizations for information to help them forecast the order in which important SSL applications will become cost-effective and estimate when each "tipping point" will be reached. It includes performance trend analysis from DOE's LED Lighting Facts and CALiPER programs, plus cost analysis from various sources. www.ssl.energy.gov/techreports.html
- 3. DOE Publishes New CALIPER Report on Subjective Evaluation of LED PAR38 Lamps The U.S. DOE has published the first in a series of four special investigations intended to extend the findings of CALIPER Application Summary Report 20: LED PAR38 Lamps, which was published late last year. The new report, CALIPER Report 20.1: Subjective Evaluation of Beam Quality, Shadow Quality, and Color Quality for LED PAR38 Lamps, focuses on a subset of the lamps from Report 20, which were separately assessed by members of the IES. The results suggest that many of the LED products compared favorably to halogen benchmarks in all attributes considered. www.ssl.energy.gov/reports
- 4. DOE Publishes New Report on Dimming LEDs with Phase-Cut Dimmers The U.S. DOE has published a new report, Dimming LEDs with Phase-Cut Dimmers: The Specifier's Process for Maximizing Success. The report was created in response to issues raised about dimming by energy efficiency organizations and specifiers, and is based on experience from CALiPER testing and GATEWAY demonstrations. The new report reviews how phase-cut dimmers work, how LEDs differ from the incandescent lamps these dimmers were originally designed to control, and how those differences can lead to complications when attempting to dim LEDs. Such complications are often due to incompatibility between the LED source and the dimmer, rather than to any shortcomings in the LED source itself. The report: <a href="www.ssl.energy.gov/gatewaydemos results.html">www.ssl.energy.gov/gatewaydemos results.html</a>
- 5. LEDucation 8 Expands SSL Educational Expo to a 2-day Format and New Location The Designers Lighting Forum of New York announced that due to outstanding response of exhibitors and attendees alike, LEDucation 8 has expanded to a 2-day event and will be held at a new location to accommodate more exhibitors. LEDucation 8, historically known as the largest single day exhibition and educational event dedicated solely to the ever-evolving LED market and technology, will return to New York City on March 18-19<sup>th</sup>, 2014 in a new 2-day format and in a new venue the Sheraton NY Times Square hotel. <a href="http://www.leducation.org/">http://www.leducation.org/</a>

6. History of the Light Bulb - <a href="http://energy.gov/articles/history-light-bulb">http://energy.gov/articles/history-light-bulb</a> Incandescents and existing lighting fixtures use designs that date back to Edison's days. Replacing the old bulbs with LEDs is only the tip of the iceberg when it comes to saving energy on lighting. LED lighting systems designed to take full advantage of LED's strengths have even greater energy-savings potential than forcing LEDs into 19th century fixtures. It's hard to tell where lighting technology will go in the future, but one thing is clear: it won't be your grandfather's light bulb. To learn how the Energy Department is working to accelerate the efficiency and quality of LEDs, visit the <a href="Solid-State Lighting Program's website">Solid-State Lighting Program's website</a>



- 7. LED Lighting Market Value in 2014 to Reach US\$17.8 Billion, Says LEDinside The total shipments of LED lighting products will reach 1.32 billion units, representing 68% on-year growth. LEDinside pointed out that the global LED lighting product replacement tide is caused by falling LED product prices. With replacement lamps being the most obvious, bulbs and tubes are the most popular ones in the market, which account for 38% and 24% of LED lighting product demand in 2013, respectively. In addition, the demand for LED luminaires in the future will gradually rise. According to the data, the growth rate of LED lighting market demand volume in North America is expected to reach 72% in 2014; in Latin America 64%; in Europe 69%; in China 86%. <a href="http://www.digitimes.com/news/a20131120PR204.html">http://www.digitimes.com/news/a20131120PR204.html</a>
- 8. Top-10 Vendors to Occupy 69% of 2013 Global LED Lighting Sales The 10 largest vendors will together account for 69% of global LED lighting product sales in 2013, according to Taiwan's Photonics Industry & Technology Development Association (PIDA). The 10 largest vendors and respective global shares are Philips 20%, Osram 15%, Panasonic 8%, Toshiba 7%, Cree 4%, Endo 4%, Zumtobel 3%, Koizumi 3%, Iris Ohyama 3% and Sharp 2%, PIDA indicated. According to LEDinside, global LED lighting production value in 2014 will reach US\$17.8 billion and corresponding shipments will increase 68% on year to 1.32 billion units. On-year growth in LED lighting sales volume in 2014 will be 72% in the North America market, 64% in Latin America, 69% in Europe and 86% in China. <a href="http://www.digitimes.com/news/a20131118PD200.html">http://www.digitimes.com/news/a20131118PD200.html</a>
- 9. OLED Lighting Opportunities 2013-2023: Forecasts, Technologies, Players OLED and LED lighting are both solid-state technologies and offer overlapping value propositions per market segment. They will therefore compete directly in many instances. This report is divided into two parts: (a) technology and (b) market assessment. The first offers a comprehensive yet detailed overview of both LED and OLED lighting, going through fabrication processes, material compositions, technology roadmaps, and key players. The device attributes of each technology are also critically assessed, examining parameters such as color warmth and controllability, flexibility, efficiency, surface emission, lifetime, wafer size, and luminaire design. The second section offers a blunt market assessment. http://www.researchandmarkets.com/research/clk772/oled\_lighting

- 10. Say Goodbye to the Incandescent Bulb Jan. 1 will mark the end of residential lighting as we know it. As of that day, the manufacture of the 60-watt incandescent bulb, the most widely used light bulb in America, will cease. In response, the U.S. lighting industry is working mightily to persuade U.S. consumers to purchase a near-equivalent: LEDs. 11/19 Washington Post
- 11. Traditional Light Bulbs Are Dead, Long Live LEDs The humble Edison light bulb has enjoyed a long lifespan, seeing only modest changes while technologies like television and radio have been drastically revised over time. But the familiar bulb's long, uninterrupted reign could finally be under threat as LEDs appear poised to become the new standard. 11/07 USA TODAY
- 12. DOE Office of Science Announces SBIR/STTR Funding Opportunity Grant applications for fiscal year 2014 SBIR/STTR Phase I, Release 2 funding opportunity announcement (FOA) DE-FOA-0001046 are sought in the subtopic "integrating energy-efficient solid-state lighting with advanced sensors, controls, and connectivity." Possible areas of interest for novel solutions include:
  - SSL luminaires and lamps.
  - SSL components, materials, or constituent components.
  - SSL systems, components, sensors, and software.

Letters of intent are due to DOE's Office of Science Dec. 16, 2013. Full proposals are due Feb. 4, 2014, with award notifications anticipated in April. <a href="http://science.energy.gov/sbir/funding-opportunities/">http://science.energy.gov/sbir/funding-opportunities/</a>

- 13. Zhaga Publishes New Downlight and Rectangular LED Module Specifications The Zhaga Consortium has published its Book 7 and 8 specifications for LED light engines (LLEs), essentially placing the standards into the public domain for usage by any company. The new specifications, for modules focused on linear/square fixtures and downlights respectively, join Books 1, 2, and 3 that Zhaga previously made available for public use. Modular solid-state lighting (SSL) technology in general, and Zhaga-based modules in particular, are meant to accelerate product development and in the case of Zhaga allow lighting manufacturers to choose from compatible LLEs offered by multiple vendors. There are now Zhaga specifications, that the consortium calls books, to serve in a variety of indoor and outdoor fixtures types. http://ledsmagazine.com/news/10/11/10
- 14. Christmas Lights Are Going Green The shift is showing up at stores, which are selling more of the efficient LED lights. Wal-Mart is devoting half of its shelf space for Christmas lights to LEDs and offering a string of 50 mini LED lights for \$5, down from \$6.30 last year. Costco is selling no incandescent Christmas lights at all. General Electric, which has peddled holiday lighting for more than a century, expects that two out of every five strings of lights sold this year will be LEDs. 11/11 The Kansas City Star
- 15. Philips and Desso Announce Partnership to Develop Light Transmissive Carpets Lighting maker Philips and carpet maker Desso said the partnership will further unlock the potential of LED integration into surfaces and will transform the way people interact with information and their environment in offices, hotels, conference centers and other public buildings. The LED light emitting carpets will provide many benefits in the areas of information, direction, inspiration and safety, such as guiding people around buildings, including safety exits and routes; enhancing the ambiance and atmosphere of the interior of buildings combining lighting with design and color; and helping to de-clutter spaces by making information visible only when needed. <a href="http://www.digitimes.com/news/a20131119PR204.html">http://www.digitimes.com/news/a20131119PR204.html</a>

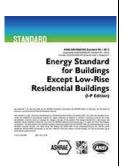
16. Osram LEDs to Light The Sistine Chapel's Michelangelo *Frescoes* - The project, involving custom-designed fixtures optimized for beam control and with a color spectrum that will highlight the pigmentation in the frescoes, will be completed next year, although a pilot project entitled LED4Art has already proven the concept. LED-based lighting will enable higher illuminance levels on iconic artwork in famed Rome cathedral while preserving the historically-significant work and utilizing 60% less energy. http://ledsmagazine.com/news/10/11/7



- 17. DOE Publishes CALIPER Snapshot Report on LED A Lamps The U.S. Department of Energy's CALiPER program has released a Snapshot Report on LED A lamps, which utilizes the LED Lighting Facts<sup>®</sup> program's extensive product database to help industry stakeholders understand the current state and trajectory of the market for that class of products. The mean efficacy of all A lamps listed by LED Lighting Facts has steadily increased, and is now at 69 lm/W. Full report at: http://apps1.eere.energy.gov/buildings/publications/pdfs/ssl/snapshot2013\_a-lamp.pdf
- 18. Opportunities for the LED Luminaire Supply Chain 2012-2018 LEDs are being increasingly used across a wide range of applications including portable electronics, TV backlighting, solid state lighting and also in automotive. This is an evolving market as LED efficacy continues to improve and the packaging and assembly market has to adapt accordingly. The report reviews the developments driving the future requirements for thermal interface and other relevant materials in the assembly and packaging supply chain and analyses the cost performance benefits of the various packaging technologies to determine the potential opportunities for the supply chain over the next five years. For more information click on: http://www.researchandmarkets.com/publication/mejqz14/opportunities for the led luminaire supply ch
- 19. Soraa Expands Its LED Manufacturing Operations in U.S. Soraa has announced that it will open a new semiconductor fabrication plant in Buffalo, NY. In partnership with the State of New York, the company will construct a new state-of-the-art GaN<sup>TM</sup> LED fabrication facility that will employ hundreds of workers. The new facility is projected to be operational in 2015. Soraa currently operates an LED fabrication plant in Fremont, CA, one of only a few in the U.S. www.tedmag.com
- 20. LED vs. Everything Else: Interior & Exterior Instructed by Stan Walerczyk, L.C., C.L.E.P. Yes, LEDs are new, rapidly improving and have the 'wow' factor, but how do they currently compare with high performance incumbent technologies and some other new technologies in interior and exterior applications? How will these comparisons change in just one or two years? What are the best applications for currently available LED products? When should interim technologies be used before LEDs are really ready for prime time in some applications? 8-Hour Distance Learning Seminar; Earns 0.8 CEU / 8 PDH; Presented in four 2-hour live online sessions; New Program Starts January 13 AEE Seminars registrar@aeecenter.org
- 21. 2013 SSL Market Introduction Workshop Presentations Posted More than 200 attendees gathered to share the latest updates and strategies for successful market introduction of high-quality, energyefficient SSL solutions at the eighth annual DOE Solid-State Lighting Market Introduction Workshop, held November 12–14 in Portland, OR. The workshop presentations and materials have been posted on the DOE SSL website at www.ssl.energy.gov/portland2013 materials.html

## **National Energy Issues to Watch...**

22. ASHRAE/IES Publish 2013 Energy Standard 90.1-2013 - Energy Standard for Buildings Except Low-Rise Residential Buildings, incorporates 110 addenda, reflecting changes made through the public review process. Appendix F gives brief descriptions and publication dates of the addenda to 90.1-2010 reflected in this new edition. The most significant lighting changes include improvements to daylighting and daylighting controls, space-by-space lighting power density limits, thresholds for toplighting and revised controls requirements and format. http://www.techstreet.com/ashrae/products/1865966



- 23. LEED Remains Preferred Rating System for Federal Buildings The GSA concluded that the U.S. Green Building Council's (USGBC) LEED green building rating system can and should be used in government buildings to advance energy efficiency and to save taxpayers' money. GSA issued its recommendation based on the findings of the EISA §436(h) Ad-Hoc Review Group on Green Building Certification Systems. More than 1.5 million square feet of space is certified using LEED every day, making LEED the most widely used high-performance building program for the design, construction, maintenance and operations of green buildings. More than 55,000 projects are currently participating in the commercial and institutional LEED rating systems, comprising 10.4 billion square feet of construction space in more than 140 countries and territories. http://www.edcmag.com/articles/95298-leed-remains-preferred-rating-system-for-federal-buildings
- 24. Introducing LEEDv4 The U.S. Green Building Council is raising the bar for sustainable construction with the launch of the Leadership in Energy and Environmental Design version 4 (LEEDv4) rating system. The new system streamlines the arduous LEED certification process, updates previously established guidelines to match more recent building codes, offers a new breakdown of standards by sector, and encourages collaboration among the architects, builders, and others involved in the construction and design process. Projects can obtain LEED 2009 certification until June 1, 2015, when LEEDv4 becomes the only rating system available. http://www.usgbc.org/leed/v4
- 25. Price of Electricity Hit Record for October; Up 42% in Decade The price of electricity hit a record for the month of October, according to data released Wednesday by the Bureau of Labor Statistics. That made October the eleventh straight month when the average price of electricity hit or matched the record level for that month. The average price of electricity in October was 13.2 cents per kilowatt hour (KWH), up from 12.8 cents per KWH in October 2012—and up from 9.3 cents per KWH in October 2003. Americans now pay 42 percent more for electricity than they did a decade ago. See more at: <a href="http://data.bls.gov/cgi-bin/surveymost?ap">http://data.bls.gov/cgi-bin/surveymost?ap</a>
- **26.** Top U.S. Organizations Using Most Green Power The U.S. Environmental Protection Agency (EPA) released its updated lists of the top Green Power Partnership (GPP) organizations choosing to use clean, renewable electricity. The top 10 partners appearing on the Top 100 list include:
  - 1) Intel Corporation
  - 2) Microsoft Corporation
  - 3) Kohl's Department Stores
  - 4) Whole Foods Market
  - 5) Wal-Mart Stores Inc.

- 6) U.S. Department of Energy
- 7) Staples
- 8) City of Houston, TX
- 9) Starbucks Company-Owned Stores
- 10) Apple Inc.

For more on the Top Rankings visit: www.epa.gov/greenpower/toplists/index.htm



27. IES Publishes Recommended Practice for Daylighting Buildings (RP-5-13) - This Recommended Practice module includes the most up-to-date data on the many benefits of daylighting, including energy savings of 40-50% or more. It also offers information and expertise on daylight delivery methods, glazing systems, shading techniques, control strategies and daylight performance simulation tools. The challenges of daylighting include glare, unwanted solar heat gain, the control of electric lighting, shading systems and coordination of the multiple disciplines affecting daylighting performance from initial planning to actual occupancy. <a href="http://www.ies.org/store">http://www.ies.org/store</a>



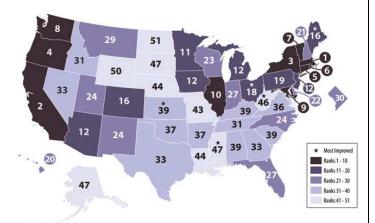
- 26. NEMA Publishes NEMA BL 3-2013 Dimming Ballast Energy Performance The National Electrical Manufacturers Association (NEMA) published NEMA BL 3-2013 Dimming Ballast Energy Performance. This standard provides a methodology for applying existing test methods for program start ballasts to fluorescent dimming ballasts. It also provides a method to calculate ballast luminous efficiency (BLE) for fluorescent dimming ballasts. Information for proper lamp and ballast compatibility for reliable long term dimming system operation can be found in NEMA LL 9-2011 Dimming of T8 Fluorescent Lighting Systems www.nema.org
- 27. NEMA's Indexes for HID Lamp Shipments Continued to Hover Near Historical Low Levels During 2013Q2 The index for mercury vapor lamp shipments continued to track downward, declining by 8.2% on a year-over-year (y/y) basis. Likewise, shipments of metal halide lamps fell 6.4% y/y, landing at the second lowest level in the series history. Sodium vapor was the lone HID index segment to show improvement registering a gain of 0.4%. Sodium vapor lamps increased their share by 0.9 percentage points to 33.2%. Shares of mercury vapor and metal halide lamps decreased to 4.2% and 62.6%, respectively. <a href="http://www.nema.org">http://www.nema.org</a>
- 28. North American and European Lighting Controls Market to Reach \$2.42 Billion in 2016 According to a report recently released by Verify Markets, a market research firm specializing in industrial, environmental, energy, consumer products and water markets. This represents a CAGR of 4.2% between 2011-2016. The report covers lighting control modules (relay panels, group controllers, scene controllers and DMX controllers), user interfaces (sliders, touch panels, timers and dimmers), sensors (occupancy and other), lighting control systems (centralized and distributed), dimmers and sensors, and networked luminaires. http://lightingcontrolsassociation.org/
- 29. ENERGY STAR® Center Beam Intensity Tool Update The U.S. EPA has released an update to the Center Beam Intensity Tool for the ENERGY STAR Lamps specification to better reflect the Tool's capabilities and limitations. The Tool was built using published data for common incandescent and halogen PAR and MR lamps in the market. The Tool's underlying calculations remain unchanged, but now it will be clear when values entered are not supported by the underlying dataset. These updates were made to ensure that values generated by the tool reflect the intention of the tool and the incumbent technology dataset it was built from. Download at Light Bulbs for Partners
- 30. tED Magazine Prepares to Celebrate Its 50th Anniversary In 2014, tED magazine will celebrate its 50th anniversary. Each month, the magazine will have a special feature looking back on 50 years of bringing you news about electrical distribution industry. http://www.tedmag.com

- 31. ENERGY STAR Lighting Road Mapping Meeting January 30, 2014 The U.S. EPA and NEMA welcome lighting stakeholders to a rescheduled initial road mapping discussion on January 30, 2014 from 1:00 5:00PM EST at NEMA headquarters in Rosslyn, VA. This meeting is expected to be the first in a series intended to facilitate engagement on ENERGY STAR lighting topics. A draft agenda is attached, and RSVP via email by December 30<sup>th</sup> to Alex Boesenberg at Alex.Boesenberg@nema.org
- 32. USA High Efficiency Lighting Market Worth \$11.7B by 2017 The US market for high efficiency lighting continues to adjust to the provisions of the Energy Independence and Security Act (EISA) of 2007, which is leading to a phase-out of incandescent lamps and supporting demand for products such as LEDs and CFLs. Technological innovations that are improving the performance of LEDs and many types of high efficiency lamps are also supporting demand. The market for energy efficient linear fluorescent lamps will also register strong growth, supported by heightened penetration of T5 and T8 lamps, in place of less efficient T12 products. <a href="http://www.ciol.com/ciol/news/202406/us-efficiency-lighting-market-worth-usd117-bn-2017-report">http://www.ciol.com/ciol/news/202406/us-efficiency-lighting-market-worth-usd117-bn-2017-report</a>
- 33. Philips On 'The Future of Light' Based upon expert interviews and more than 50 case studies, the report summarizes 12 trends which have been grouped into four themes showing the way lighting can be used to create experiences, tell stories, convey information and promote wellness. The PSFK report highlights projects which collectively demonstrate the numerous benefits of light, ranging from healthy sleep patterns and feelings of safety, through to macro issues, including the readdress of resource scarcity and climate change. <a href="http://electricalcontractor.com/?p=11760">http://electricalcontractor.com/?p=11760</a>
- 34. MaxLite Launches Mobile Website To meet the rapidly changing needs of customers and other lighting professionals that work in the field, MaxLite® has launched an easy-to-navigate mobile website that dynamically displays data sheets, images and information from the company's extensive product library for use with any type of smartphone. Rather than using downloads, the website will provide information dynamically and instantaneously. MaxLite's mobile website is updated daily with new product and application images, specification information, promotions and other corporate information that is vital to its distributors, specifiers and sales representatives. View the mobile website from your personal computer at <a href="http://m.maxlite.com">http://m.maxlite.com</a>
- 35. Lutron and Hubbell Announce Collaboration to Address New Building Codes Hubbell will embed Lutron's Clear Connect radio frequency (RF) communication technology directly into Hubbell's Load:Logic plug load control products. This expands the interoperability of Clear Connect-enabled devices, provides the industry with a much-needed, code-compliant solution, and allows installers to easily control electrical outlets in new and existing facilities without learning new systems or performing extensive commissioning. 11/08 HCN
- 36. http://www.globalconevent.com/



# **State Energy Issues to Watch...**

37. The Most Energy-Efficient U.S. States - The American Council for an Energy-Efficient Economy (ACEEE) issued its annual scorecard for each state based on multiple factors, including reductions in greenhouse gas, energy codes for buildings and switching to cleaner fuels. The top five include: Oregon, New York, California, Massachusetts, and Connecticut <a href="http://aceee.org/state-policy/scorecard">http://aceee.org/state-policy/scorecard</a>



- 38. Con Ed 2012 Rates Highest of Any Major US Utility Con Ed's 2.1 million residential customers in New York City and Westchester County paid an average of 25.65 cents per kilowatt hour in 2012, the data released Friday by the U.S. Energy Information Administration. That's more than twice the national average price of 11.88 cents per kilowatt hour. Con Ed said in a statement that more than 25 percent of the bill consists of government-imposed taxes and fees. Long Island Power Authority customers also paid some of the country's highest rates at 19.03 cents per kilowatt hour last year. 11/12 AP
- 39. Hundreds of LED Lights Illuminate NYC's 1 World Trade Center Spire Hundreds of red, white and blue LED modules are illuminating lower Manhattan as officials test the lights atop 1 World Trade Center. The port authority of New York and New Jersey said Friday the beacon is packed with nearly 300 modules and their glow can be seen for up to 50 miles. The beacon and spire together stand 408 feet tall and bring the building, formerly called the Freedom Tower, to its symbolic height of 1,776 feet and is deemed the nation's tallest building. 11/08 AP
- 40. Eaton LED Solutions Improve Lighting for Georgia Auto Dealership Power management company Eaton and its Cooper Lighting division are proving that LED fixtures can provide more than just energy savings with a recent project for Georgia-based car dealership, Nalley Honda-Buick-GMC-Isuzu located in Brunswick. To showcase automobiles and reduce energy expenses, Eaton's Cooper Lighting business teamed up with Georgia Power to install 76 Streetworks Galleon LED fixtures, resulting in impressive illumination and an overall energy savings of 60 percent.

11/15 http://www.tedmag.com

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Our business is changing your future...

41. Raleigh Orthopaedic Selects Cree LED Lighting - Raleigh Orthopaedic Clinic, one of the city's largest orthopaedic practices, chose LED lighting from Cree, Inc. for the facility's new state-of-the-art headquarters and surgery center. The North Carolina facility installed more than 1,000 Cree® CR Series LED architectural troffers throughout the 98,000-square-foot clinic. According to Raleigh Orthopaedic, the newly installed LED troffers will decrease the clinic's lighting energy usage by 54 percent compared to outdated fluorescent technologies. <a href="http://www.tedmag.com">http://www.tedmag.com</a>



- **42.** Duke Energy Offers Holiday Lighting Calculator, Information to Help Save Energy and Money Customers can estimate their holiday lighting costs using a calculator on Duke Energy's website: www.duke-energy.com/lightscalculator 12/02 PRNewswire
- 43. Utility Donating Light Bulbs to WVA Pantries West Virginia food pantries are getting a non-edible donation from Appalachian Power. The Huntington Area Food Bank will receive 44,000 energy-saving compact fluorescent light bulbs from the utility Wednesday. The bulbs will be distributed in packages of four to 11,000 West Virginia families through multiple food pantries. The partnership is part of the utility's GridSMART energy efficiency initiative, which helps inform people on ways to manage energy use, save money and protect the environment. 12/03 AP
- 44. FPL Installs More Than 150 State-Of-The-Art Streetlights to Help Brighten West Palm Beach Florida Power & Light Company (FPL) today completed its first commercial energy-efficient streetlight installation project. Since October, FPL has installed 166 light-emitting diode (LED) streetlights in the City of West Palm Beach's Coleman Park neighborhood, located just north of downtown. Through 2014, the city plans to convert approximately 1,100 additional streetlights to LED technology in various neighborhoods. 12/02 PRNewswire
- 45. DTE Energy, MI Adds Two Energy-Savings Tools to Web Site The new Lighting Guide, meanwhile, takes a comprehensive look at modern lighting, showing which bulbs are the most energy efficient and cost effective. The Lighting Guide also shows where bulbs can be purchased at special DTE Energy discounted prices. The Guide is continually updated with new information. <a href="https://www.dteenergy.com/LightingGuide">www.dteenergy.com/LightingGuide</a>
- **46.** Chicago City Infrastructure Trust Eyes ComEd Efficiency Fund The money would come from ComEd customers who pay, on average, \$1.24 a month on their bills for energy efficiency programs. The fund totals almost \$160 million annually, money that currently is used for programs such as swapping out light bulbs and providing rebates on appliances. 11/12 Chicago Tribune
- 47. Little Fanfare for the Texas \$7 Billion Clean-Energy Project The last legs of a 3,600-mile system of transmission lines bringing wind-generated electricity from West Texas to the state's urban areas will be finished by the end of the year with little or no fanfare. The project -- perhaps the state's largest clean-energy investment -- is getting little public notice from state authorities because of past controversies that helped add \$2 billion to the cost, or that the final verdict on the overall benefit is still out because the 18,450 megawatt system comes on-line at half capacity. Or perhaps officials don't want to draw attention to the \$5 to \$10 monthly increase that is coming to the electricity bills for the millions of customers of the state's primary electricity grid. 11/02 American-Statesman

## Monthly Special Feature... The U.S. Energy Service Company Market -



The U.S. energy service company (ESCO) market has been championed over the last 30 years as a breakthrough in energy efficiency financing. ESCOs use a range of energy efficiency financing instruments, such as energy performance contracting (EPC), to help customers finance energy efficiency upgrades through the future energy savings that energy efficiency can generate. This market is strongest in the municipal, university, schools, and hospital (MUSH) sector, with significant activity in the federal sector as well. The market landscape includes a number of large building equipment manufacturers such as Johnson Controls and Honeywell, as well as other ESCOs affiliated with utilities and engineering service providers.

In recent years, the U.S. ESCO market has gone through a difficult period. Customer concerns about the impact of EPCs on their financial position, as well as a lack of supportive policies, have slowed market activity. Since many of the resources, including policy measures, that drove growth prior to 2011 have been exhausted, ESCO market activity has slowed considerably. Various ESCOs have reported declines in revenue in 2012 and 2013 compared with 2011. However, as the market regains health over the next 2 to 3 years, the ESCO business model will start to evolve. Growing demand for renewable energy systems and distributed energy infrastructure is leading many ESCOs to develop and acquire new capabilities. Navigant Research forecasts that the U.S. ESCO market will grow from \$4.9 billion in 2013 to \$8.3 billion by 2020.

This Navigant Research report examines the ESCO market in the United States, detailing drivers and barriers to the deeper penetration of energy efficiency in the U.S. economy. The study covers all ESCO sectors, including MUSH, federal, commercial and industrial, and public housing. Market forecasts of ESCO revenue in the United States, segmented by sector and technology, extend through 2020. The report also analyzes various ESCO financing models and energy efficiency technologies and profiles key industry players.

#### **Key Questions Addressed:**

- What is an ESCO?
- Who are the key players in the U.S. ESCO market?
- How is the ESCO business model changing?
- What are the key market and policy drivers supporting the U.S. ESCO market?
- How large is the U.S. ESCO market and which segments will experience the fastest growth?

http://www.navigantresearch.com/research/the-u-s-energy-service-company-market