

EnergyWatch

 Attardi Marketing

February 2012

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

The New Year lies before you like a spotless tract of snow.....be careful how you tread on it for every mark will show.

The war of ideas among Arabs and Muslims can only be fought and won by their own forces of moderation, and those forces can only emerge from a growing middle class with a sense of dignity and hope for the future. Young people who grow up in a context of real economic opportunity, basic rule of law and the right to speak and write what they please don't usually want to blow up the world. They want to be part of it.

Thomas Friedman

Something to Think About...

New Year's Resolution: Don't Miss the Boat - Are you in the Energy Efficient Supply Business? Are you in the Electronic Lighting Market? If not, then you may be on your way to extinction. Going "green" is not a hope that may go away in ten years. It's happening now and will be a way of life for a very long time. YOU, the full line electrical distributor are in the best position to provide the technologically advanced products and qualified services to satisfy the ongoing energy conservation needs of your customers:

- ⚙ access to the customer at the highest organizational level... if not, why not?
- ⚙ relations with vendors that provide the new technologically advanced products
- ⚙ an existing sales force with the product and local market knowledge to create sales opportunities
- ⚙ awareness and participation of state and utility energy activities and incentives

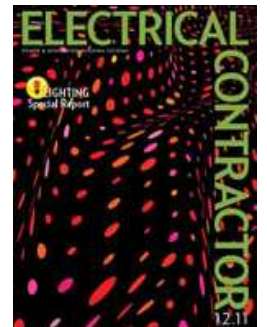


National Energy Issues to Watch...



2011 Lighting
Progress Report.pdf

1. **The 2011 IES Progress Report Finds Its Way into Print in the January Issue of LD+ A**
2. **2011: The Year in Energy Efficiency** - <http://ase.org/efficiencynews/2011-year-energy-efficiency>
3. **2012 Rebate Programs Have Started** - Many electric utilities and government organizations across the nation have been busy updating their rebate programs for 2012. A majority have already released their new programs, with others to have them by the end of the month. While every program is different, some of the most common changes we have seen are different rebate amounts, additional restrictions on which lighting systems may qualify for rebates, and more programs adding incentives for LED lighting solutions. At this time, energy efficient commercial lighting covers 79% of the US. <http://www.briteswitch.com/newsletter/Jan12-1.html>
4. **ZigBee Light Link: LED Lighting Control Standardized** - The ZigBee® Alliance, a global ecosystem of companies creating wireless solutions for use in energy management, commercial and consumer applications, today announced it is developing a new open standard designed for LED lighting control – ZigBee Light Link™. 1/04 <http://www.sacbee.com/2012/01/04/4161807/zigbee-light-link-led-lighting.html> (See the Monthly Special Feature...)
5. **Federal Buildings: Leading in Energy Efficiency** - The White House recently pledged \$2 billion for energy efficiency improvements in federal buildings, underscoring efforts already underway to save energy in several government facilities. The government is the largest user of electricity and fuel in the United States, and buildings account for about 30% of the government's energy use. To cut down on energy use – as well as save taxpayer money and help the environment – nearly all government agencies are adopting energy efficiency measures. <http://ase.org/efficiencynews/federal-buildings-leading-energy-efficiency>
6. **Energy Independence by Jim Hartung** - The US consumed approximately 7 billion barrels of liquid fuels in 2010. Of this, over 4 billion barrels were produced in the US or imported from Canada. The remainder (less than 3 billion barrels) was imported from other countries. Oil imports from countries other than Canada could be reduced to near-zero in the next 25 years. This can be achieved as follows: 1) increase US oil production by 1 billion barrels per year, 2) increase oil imports from Canada by 1 billion barrels per year, and 3) decrease US oil consumption by 1 billion barrels per year through improved efficiency and use of alternative fuels. This will make the US and Canada essentially energy-independent -- and provide a solid foundation for sustainable economic growth for many decades, while alternative energy resources and technologies are developed. <http://www.energypulse.net>
7. **The Control Narrative (Feature Story)** - Driven by commercial building energy codes, green building projects and owner demands for flexibility and lighting energy savings, lighting controls increasingly are being specified, and specified systems are becoming increasingly sophisticated. Complexity begets stronger functionality and more risks. In a perfect world, designers provide detailed requirements for control functionality and installation that are easily understandable. 12/'11 Electrical Contractor



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Our business is changing your future...

8. **DOE Report Characterizes Lighting Market** - The U.S. Department of Energy (DOE) has released a report detailing the characteristics of the U.S. lighting market by technology and sector. The *2010 U.S. Lighting Market Characterization* provides comprehensive and detailed estimates of the national inventory of installed lamps as well as their associated energy use and lumen production. It focuses on four sectors: residential buildings, commercial buildings, industrial buildings, and outdoor. The new report is an update to a similar DOE report that modeled the 2001 U.S. lighting market inventory. During the intervening decade, two overarching trends emerged:

- *Push toward higher-efficacy lighting.* The average system efficacy of installed lighting increased from 45 lumens per watt in 2001 to 58 lumens per watt in 2010, due mainly to a move from incandescent to compact fluorescent lamps in the residential sector, and from T12 to T8 and T5 fluorescent lamps in the commercial and industrial sectors.
- *Increased demand for light.* The total number of lamps installed in U.S. stationary applications grew from just under 7 billion in 2001 to more than 8 billion in 2010, with most of this growth occurring in the residential sector.
- To download a PDF of the full report, go to www.ssl.energy.gov/tech_reports.html

9. **DOE Releases Report on SSL Energy Savings Potential** - The U.S. DOE has published a report forecasting the energy savings potential of LED white-light sources compared with conventional white-light sources. *Energy Savings Potential of Solid-State Lighting in General Illumination Applications* compares the annual lighting energy consumption in the U.S. with and without the further market penetration of LED lighting. Among the highlights:

- LED lighting is expected to represent 36 percent of lumen-hour sales on the general illumination market by 2020, and 74 percent by 2030.
- By 2030, the annual site energy savings from market penetration of LEDs will be approximately 300 terawatt-hours, or the equivalent annual electrical output of about 50 1,000-megawatt power plants. At today's energy prices, that equates to approximately \$30 billion in savings in 2030 alone.
- Assuming the same mix of power stations, these savings would reduce greenhouse gas emissions by 210 million metric tons of carbon in 2030. The total energy consumption for lighting would decrease by roughly 46 percent relative to a scenario with no additional LEDs on the market – enough electricity to completely power nearly 24 million homes.

To download a PDF of the report, go to www.ssl.energy.gov/tech_reports.html

(See the Monthly Special Feature...)

10. **Highlights of What DOE's SSL Program Has Planned for 2012** -

- The [ninth annual SSL R&D Workshop](#), which will be held in Atlanta from January 31 to February 2.
- January publication of two key DOE reports: *Energy Savings Potential of Solid-State Lighting in General Illumination Applications* estimates the national energy savings that could be realized through the market penetration of energy-efficient solid-state lighting if the technology achieves price and performance objectives; The *2010 U.S. Lighting Market Characterization* estimates the number of lamps installed in the U.S. and their related energy consumption in 2010.
- DOE's [Municipal Solid-State Street Lighting Consortium](#) with the release of a new tool called the Lighting Retrofit Cost Model
- A guidance document to help users customize the recently published [Model Specification for LED Roadway Luminaires](#)



- DOE will publish the latest Product Snapshot report from the [LED Lighting Facts](#)[®] program
- DOE's [CALiPER](#) program will continue its ongoing testing and reporting, and plans to release two special reports in 2012
- The [Next Generation Luminaires](#) design competition is expanding in 2012

11. For Stakeholder Review: Updated ENERGY STAR Vision and Guiding Principles Document -

The U.S. EPA is launching a process to engage partners in an update of the Vision and Guiding Principles document, consistent with the evolution of the program since the original document was developed in 2003. Stakeholders interested in providing input on the ENERGY STAR Vision and Guiding Principles document are encouraged to contact and/or submit comments or questions to EnergyStarProducts@energystar.gov no later than Feb. 22, 2012.



ENERGY STAR Vision and Principles Januar

12. LED Prescriptive Programs Increase 39% - LED lamps and fixtures have quickly been adopted by commercial lighting incentive programs across the US. A few years ago, there were virtually no prescriptive programs for LED solutions. Today over 800 programs are available to commercial customers; an increase of 39% from June 2011! While the growth in programs could have been expected, it maybe be surprising to learn that the average rebate amount has decreased over the same time period. <http://www.briteswitch.com/newsletter/Jan12-2.html>

Type of LED	# of Rebate Programs	Average Rebate
Replacement Lamps	286	\$12.00
Down Light Fixtures	342	\$21.00
Accent Lighting (Track Heads)	73	\$55.00
High Bay Fixtures	118	\$95.50

13. LED Lights Extend Meat Shelf Life - New research conducted at Kansas State University that will be presented at the Capitol Graduate Research Summit in Topeka in February looked at five different meat products—pork loin chops, beef loin steaks, ground beef, ground turkey and beef inside round steaks. They examined several aspects of these meat products and their refrigeration units including discoloration, rancidity and operating efficiency. They found LED lights scored positively in nearly all areas. Most significantly, LED lights helped reduce operating costs and prolonged the shelf life for most of the meat products.

<http://www.foodproductdesign.com/news/2012/01/led-lights-extend-meat-shelf-life.aspx>

14. Report: Utilities Are Behind Growth in Energy Efficiency - Electric utilities are a major force behind the trend, according to findings from a report published by the Institute for Electric Efficiency (IEE) <http://www.edisonfoundation.net/iee/> States with regulatory frameworks that support utilities in their efforts to pursue electric efficiency as a sustainable business tend to be leaders in annual electric efficiency expenditures and budgets. Over the past two years, state regulatory frameworks have changed significantly in support of energy-efficiency programs. Given that state energy-efficiency resource standards are established in half of all U.S. states, covering two-thirds of the nation's population, and that several of these standards have scheduled increases, IEE believes that ratepayer-funded electric-efficiency budgets are very likely to exceed the Lawrence Berkeley National Lab's high-case scenario projection of \$12 billion by 2020. 1/09 Renew Grid



- 15. Building Energy Management Systems** - Commercial buildings are high energy consumers on a global basis, and as such are receiving much attention with regard to the potential savings that can be achieved with new technologies that are being utilized to monitor and control their energy use. Given the challenging business and economic environment of recent years, governments, building owners, building tenants, and companies in general are looking for ways to become more efficient both fiscally and environmentally. Building energy management systems (BEMS) are one key mechanism for achieving these efficiencies. At a higher level, attaining higher commercial building energy performance has been identified as a key component for governments around the world to achieve greater energy security for their countries. New report published by Pike Research: <http://www.pikeresearch.com/research/building-energy-management-systems>
- 16. No LED Replacement Found for Ornamental Post-Top Street Lights in DOE Pilot Project** - The US DOE has published the final report from a demonstration of LED technology in ornamental post-top street lights, which was conducted in Sacramento, CA. Four different LED replacement products were evaluated using computer simulations, field measurements and laboratory testing. An evaluation has determined that none of four different LED replacement products for ornamental post-top street lights could match the performance of the existing 100W HPS fixture. Download at: http://apps1.eere.energy.gov/buildings/publications/pdfs/ssl/2011_gateway-msslc_sacramento.pdf
- 17. Cloud-Based Lighting** - Among the technologies on the cutting edges of research and development, we have cloud-based computing and solid-state lighting. A Tokyo-based company, NetLED Technology Corp. offers LED lighting that can be controlled using iPhone apps via a cloud-based control interface. You can use your phone or tablet to dim the lights or switch them on and off. The system also makes it possible to track energy usage in real-time and to automatically aggregate data over an extended period of time. <http://finance.boston.com/boston/news/read?GUID=20416566>
- 18. Empowering Customers With a Green Button** - The White House hopes that someday soon everyone will be able to monitor and control their home energy usage, and lower their monthly utility bills, with a few swipes on a smartphone app. At least that's the vision of the Green Button initiative, a recent White House effort to bring together the nation's utilities, energy consumers and private industry to develop Internet and mobile phone-style technologies and business models aimed at reducing energy consumption. <http://www.whitehouse.gov/blog/2011/11/21/empowering-customers-green-button>
- 19. NEMA Publishes LSD 56-2011** - Provides design guidance in the area of lamp/dimmer compatibility to the manufacturers of dimmable self-ballasted compact fluorescent lamps (CFLs) that use forward phase control and the manufacturers of forward phase control dimmers. <http://www.nema.org/stds/LSD-56.cfm#download>
- 20. 2012 PAR Survey Now Underway** - NAED's annual Performance Analysis Report revealed the typical electrical distributor generated \$50.6 million in 2010 sales. The [2012 PAR survey](#) now underway. Stocked with intelligence on gross margins, returns on investment, employee productivity, inventory turns and much more, the PAR offers a comprehensive look at the distribution landscape, helping managers plan and prepare for the year ahead. The cost to participate is \$300 for member companies. Deadline for participating in the survey is March 31. For more information, contact NAED Member Services at 888-791-2512 or memberservices@naed.org



- 21. *The State of Solid State Lighting by Steve Nadell*** - Today's LEDs have come a long way. The issues architects and designers may have had with LEDs in the past — variations in color, effective heat sinking and cost — will eventually become obsolete as electrical technology continues to improve. <http://www.sustainablefacility.com/articles/87581-the-state-of-solid-state-lighting>
- 22. *Employers Add 200,000 Jobs, Unemployment Rate Falls to 8.5 Percent*** - The rate has dropped for four straight months. The hiring gains cap a six-month stretch in which the economy generated 100,000 jobs or more in each month. That hasn't happened since April 2006. For all of 2011, the economy added 1.6 million jobs, better than the 940,000 added in 2010. The unemployment rate averaged 8.9 percent last year, down from 9.6 percent the previous year. 1/06 Washington Post
- 23. *2012 Nonresidential Construction Outlook: A Modest Recovery*** - In June 2011, the American Institute of Architects (AIA) semi-annual Consensus Construction Forecast projected a 5.6% decrease in nonresidential construction spending in 2011 from 2010, followed by a significant rebound with a projected 6.4% increase in spending in 2012. A weaker than expected economy led to a revision of this forecast in January 2012 projecting 2.1% growth in nonresidential construction spending in 2012 and 6.4% in 2013. In short, a modest recovery in 2012. <http://lightingcontrolsassociation.org/2012-nonresidential-construction-forecast-a-modest-recovery/>
- 24. *U.S. Economy Grew at 2.8 Percent Rate in Fourth Quarter*** - The U.S. economy grew at a modest 2.8 percent rate in the final three months of last year, the fastest growth in 2011. Americans spent more on cars and trucks, and companies built up their stockpiles. But growth in the October-December quarter — and all of 2011 — was held back by the biggest annual government spending cuts in four decades. The Commerce Department says the economy grew just 1.7 percent last year, roughly half of the growth in 2010 and the worst since the recession. The outlook for 2012 is slightly better. The Federal Reserve has estimated economic growth of roughly 2.5 percent for the year, despite abundant risk factors: federal spending cuts, weak pay increases, cautious consumers and the risk of a European recession. 1/27 Washington Post
- 25. *IMF Report: Global Economy to Slow Sharply*** - The world economy is slowing sharply, and the euro region headed for recession this year, the International Monetary Fund predicted Tuesday in a bleak update of global conditions. Overall, the world economy is expected to expand 3.25 percent in 2012 -- down from the 4 percent projected by the IMF in the fall. That figure includes 8.2 percent growth in China, still the world's most quickly expanding economy, and 7 percent in India. U.S. Growth is forecast at 1.8 percent, the same as the fund projected in the fall. In those cases and for the rest of the world, the IMF said growth was being crimped by what remains the world's major economic risk -- the ongoing financial crisis in the euro zone. In a trio of reports released Tuesday morning, the IMF forecasts a "mild recession" for the 17-nation euro zone this year, and warns that matters could easily worsen. 1/24 Washington Post
- 26. *LED Lighting Gets More Versatile*** - Acuity Brands expanded its LED indoor ambient lighting portfolio with the launch of the Z Series LED striplight by Lithonia Lighting. The Z Series luminaires are compact, low-profile solid-state strips that deliver long maintenance-free performance in a wide range of retrofit and new construction applications, including uplight and downlight in commercial, retail, manufacturing, warehouse, cove and display. The Z Series luminaires are available in both T5 and T8 lengths. They join the portfolio of Lithonia Lighting LED indoor ambient lighting products. <http://www.acuitybrands.com/LEDlighting.aspx>



- 27. IES 2012 Illumination Awards Now Accepting Submissions for Lighting Controls Innovation Award** - <http://www.ies.org/ia/index.cfm>
- 28. TerraLUX Appoints Lighting Veteran Ray Hurt as VP Sales** - TerraLUX, Inc. today announced that Ray Hurt will join the TerraLUX team as Vice President of Sales for their Illumination Division, effective February 1, 2012. Hurt brings over 25 years of lighting and electronics experience, including a long tenure with Philips Lighting Electronics, where he held various executive level sales and marketing positions.
- 29. Development of OLED Lighting for Car Roof Presented for the First Time** - BASF and Philips have successfully developed the approach of incorporating OLED technology in car roofs. These OLEDs generate light inside the vehicle when turned on. When it is turned off, it becomes transparent and provides a clear view outside the vehicle. <http://www.azooptics.com/News.aspx?newsID=14977>
- 30. Profile of an L Prize Winner** - No light bulb in history has endured more extensive public testing than the winning L Prize entry from Philips Lighting North America. It stood up to rigorous assessments in the field and laboratory, meeting or exceeding all performance targets, and along the way enhanced our knowledge of LED lighting performance in general. As an LED replacement for the 60W incandescent bulb, the winning product measures up in multiple ways, while consuming fewer than 10W. <http://www.lightingprize.org/>
- 31. Next Generation of Lighting-Class LEDs** - Cree, Inc. recently announced the creation of the XLamp® XB-D LED, the first LED based on the new Cree technology platform. According to the company, the XB-D LED delivers twice the lumens per-dollar of other LEDs, in the industry's smallest lighting-class footprint of 2.45 mm x 2.45 mm. The XB-D LED offers 136 lumens per watt in cool white (6000K) or up to 107 lumens and 105 lumens per watt in warm white (3000K) both at 350 mA and 85°C. 1/09 Clean Technica
- 32. Liquid-Cooled Lighting?** - Cooling is a key consideration in the design of LED lighting. Heat build-up can shorten the life of LEDs and limit their usefulness, especially in retrofit applications. Switch Lighting <http://switchlightbulbs.com/> San Jose, Calif., has an innovative solution: rather than the array of fins we see on many LED lamps, they've gone with a liquid-cooled design, which they claim gives the lamps better efficiency. <http://livewire.electricalmarketing.com/2012/01/11/liquid-cooled-lighting/>
- 33. Taiwan Remains World's No.1 LED Maker by Revenue** - Taiwan's LED industry remains the world's No.1 by revenue in 2011, with the year's revenue estimated at US\$4.53 billion, according to the non-profit Photonics Industry & Technology Development Association (PIDA) of Taiwan, which tracks the optoelectronics industry. However, the association pointed out that the estimated 2011 revenue represents a 0.4% recession from 2010 thanks to the weak economies in the euro zone and United States. In the meantime, South Korea's LED industry is estimated to have revenue of US\$3.35 billion in 2011, up around 5% from 2010. PIDA's studies pointed out that South Korean LED manufacturers have vigorously branched out into the lighting sector with low-priced products. However, their production scales and capacities are far behind Taiwan's, making their LED devices uncompetitive against those produced by Taiwan's manufacturers. Globally, the industry is estimated to have total revenue of US\$16.6 billion in 2011 alone, inching up 2.6% from 2010. http://news.cens.com/cens/html/en/news/news_inner_38779.html



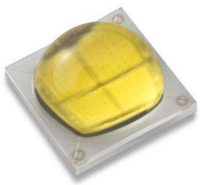
34. MaxLite Adds New LEDs to MaxLED Comprehensive Line of Light Sources and Luminaires - Expanding its comprehensive line of energy efficient light sources, MaxLite has introduced new state-of-the-art LED lamps to its popular MaxLED™ family of LED lamps and luminaires. www.maxlite.com



35. Samsung LED Becomes Part of Samsung Electronics - Samsung Electronics has announced that it will merge its LED division with its broader corporate entity effective April 1. The merger is expected to open global sales channels to the LED business and perhaps widen the company's access to the lighting market. <http://www.ledsmagazine.com/news/9/1/3>

36. LED Products Make Up 18% of Lighting Sales at Philips - Philips has revealed that sales in its lighting business were EUR 2.072 billion for the fourth quarter of 2011, (from total company sales of EUR 6.7 billion). The company said that its LED-based sales (including all types of products, from packaged LEDs to lamps and luminaires) grew 37% compared to Q4 2010: LED products now represent 18% of total lighting sales (or EUR 373 million for the quarter). <http://www.ledsmagazine.com>

37. Philips Lumileds Introduces LUXEON M for Outdoor and Industrial LED Lighting Solutions - Utilizing Philips Lumileds' latest die and phosphor technologies, LUXEON M will deliver the industry's best lumen/\$ that can be realized using low cost, readily available drivers, optics and boards for design simplicity. Initial specifications for LUXEON M include:



- More than 900 lumens at 700 mA and 85°C junction temperature
- Efficacy greater than 120 lm/W at 350 mA and 85°C junction temperature
- 12 Volt / 8 Watt package on AIN substrate

<http://www.philipslumileds.com/uploads/news/id180/PR173.pdf>

38. LEDucation 6 Opens Registration & Announces Speaker Line Up - The Designers Lighting Forum of New York (DLFNY) announces its speaker line up and also notify attendees that event registration for "LEDucation 6" is now officially open and will take place in New York City on Wednesday, March 21, 2012. <http://www.leducation.org/>

39. World's First Light Bulb Recycling Machine Debuts at IKEA - Revend Recycling Limited, a UK distributor and operator of reverse vending machines, has launched an innovative machine for the collection and recycling of domestic light bulbs and domestic batteries. Revend Recycling will sell and market unique reverse vending recycling machines throughout Europe, USA, & worldwide under its brand name Revend. <http://lighting.com/light-bulb-recycling-machine/>



40. Energy Efficiency Global Forum 2012, March 27-29 in Orlando, Florida - This will be the fifth EE Global, and the first to be held in Orlando, Florida. The international forum has been held twice in Washington, D.C., and also in Paris, France and Brussels, Belgium. Over 70% of attendees at EE Global identify as Director-level or above, making it the most concentrated gathering of influential energy efficiency professionals worldwide. The Peabody Resort, one of Orlando's most luxurious hotels, is the location of this year's event, and just happens to be minutes away from famed amusement parks, Disney World, Universal Studios Orlando, and Sea World. <http://eeglobalforum.org/registration.html>



State Energy Issues to Watch...

41. List of Top 10 States for LEED Green Buildings Released - The U.S. Green Building Council (USGBC) released its 2011 list of top 10 states for LEED-certified commercial and institutional green buildings per capita, based on the U.S. 2010 Census information.

1st) District of Columbia	6th) Maryland
2nd) Colorado	7th) Massachusetts
3rd) Illinois	8th) Texas
4th) Virginia	9th) California
5th) Washington	10th) New York

<http://www.sustainablefacility.com/articles/87590-list-of-top-10-states-for-leed-green-buildings-released>

42. DOE Releases GATEWAY Report on NYC Roadway Lighting Demonstration - The U.S. DOE has published the final evaluation report from a GATEWAY demonstration on Franklin D. Roosevelt Drive, a heavily traveled New York City freeway with elevated portions. Four different types of LED roadway luminaires—each from a different manufacturer—were purchased in 2009 and compared with the incumbent high-pressure sodium (HPS) luminaires. The report is available for download at www.ssl.energy.gov/gatewaydemos_results.html.

43. Asheville Boasts First Large-Scale LED Street Light Deployment in North Carolina - The City of Asheville has initiated North Carolina's first large-scale deployment of LED street lights. There are 3,643 LEDway® street lights from Durham-based manufacturer Cree, Inc. being installed, with projected savings of \$260,000 annually. 1/23 Market Watch

44. First Energy Paid Millions in Lighting Rebate Incentives to Cleveland and Akron Area Businesses - ROI Energy reports their lighting retrofit installations are up over 300% due to Illuminating Company and Ohio Edison lighting rebate incentives. First Energy provided millions of dollars directly to businesses who agreed to have lighting retrofit projects performed in 2011, in their effort to reduce energy use. ROI, Inc. Energy Solutions of Hudson, Ohio www.ROI-Energy.com specializes in providing turnkey lighting retrofit projects for Ohio area factories, warehouses and distribution centers. Their specialty is retrofitting industrial, 400 watt metal halide high bay lighting to energy efficient T-5 and T-8 high bay fixtures. 1/10 PRWeb.com

45. Ohio State Loans to Aid Energy Savings - To help finance the projects needed to reduce energy consumption and costs, manufacturers, small businesses, nonprofit groups and government agencies have access to a new source of low-interest loans. The Ohio Department of Development has started the Energy Loan Fund that can lend money for projects such as installation of insulation, new lighting, more-efficient heating and cooling systems, renewable-energy projects and improved production processes that could cut energy consumption. The program will use more than \$7 million in state funding from the Advanced Energy Fund that came from a utility-bill fee that expired last year. The state also will tap federal funds from the State Energy Program. 1/07 Columbus Dispatch

46. Ameren Missouri Proposes \$145 Million Efficiency Plan - The program proposed on Friday would more than double what Ameren Missouri was spending on energy efficiency before the cuts and Ameren wants ratepayers to finance them. From 2013 through the end of 2015, Ameren would collect the cost of implementing the plan through a surcharge on customer bills that would equal a rate increase of a little more than 3 percent. 1/21 St. Louis Post-Dispatch



- 47. Kentucky Adopts 2011 NEC** - According to a recent *Code Alert* issued on December 16 by the National Electrical Manufacturers Association (NEMA), the state of Kentucky approved adoption of the 2011 NEC without amendment. This version of the Code will become mandatory for all buildings in the state on February 1, 2012. 1/05 ECM Codewatch
- 48. TEP Seeks Rate Surcharge to Give Rebates** - Tucson Electric Power Co. customers will be able to get new rebates for buying variable-power pool pumps, recycling their old refrigerators and making other energy-saving moves, under a program up for approval by state regulators this week. TEP is seeking approval of an \$85.7 million plan to greatly expand energy-efficiency programs this year to meet a state requirement adopted in 2010. The plan would significantly expand existing so-called "demand-side management" programs, including consumer rebates for new energy-efficient appliances, and add a batch of new incentive programs to save energy. 1/09 Arizona Daily Star
- 49. Ace Hardware Lightens the Load for TX Military Families** - In December, Ace Hardware, the largest retailer-owned hardware cooperative in the industry, provided military families on the Fort Hood Army Base in Texas, the largest active-duty military installation in the United States, with more than 72,000 energy-efficient light bulbs. <http://lighting.com/ace-energy-efficient-light/>
- 50. SDG&E Unveils Energy Innovation Center in San Diego** - San Diego Gas & Electric (SDG&E) introduced its new Energy Innovation Center (the Center), a showcase facility where residential and business customers can learn about energy efficiency, alternative fuel transportation, Smart Grid, and clean generation. The Center offers an array of seminars on energy efficiency; classes in the food service demonstration kitchen; tours of the Smart Home full of energy-saving technology; information in the resource library, and guided tours of the water-wise walkway which showcases drought tolerant plants that saves water and energy. The Center showcases different examples of highly efficient lighting, HVAC units and leading technologies to demonstrate the choices available for businesses and design professionals to incorporate into their buildings. <http://sdge.com/innovationcenter>
- 51. Santa Cruz, CA Looks to Retrofit Two-Thirds of Streetlights** - Using grants and special financing from PG&E, the city hopes within a few months to have replaced about two-thirds of streetlights with higher-efficiency, brighter LED bulbs to increase safety and cut energy use. The city hopes to tap \$180,000 in federal Housing and Urban Development funding and also wants to enter into a \$250,000 financing agreement with PG&E to replace 500 other lights around town, with the loan to be repaid through future energy savings. 1/25 Santa Cruz Sentinel
- 52. SMUD Incentives Promote Money-Saving Lighting Control Systems** - The Sacramento Municipal Utility District is offering incentives of up to \$100,000 to help owners of small and medium-sized buildings install advanced lighting control systems. The pilot rebate program kicks off today and runs through February 2013, or until the budgeted \$1 million runs out. 2/01 Sacramento Bee
- 53. Oregon School Energy Audits Find \$40 Million in Upgrades** - Energy audit companies have taken a close look at 100 mostly small and rural school districts around Oregon to determine upgrades that are needed, how much energy can be saved, and what it might cost. Those audits show a potential savings of \$3.6 million a year if the full complement of \$40 million worth of improvements is done. With grants and other incentives, the cost to schools would total \$36 million, and the state is offering low-interest loans to pay for it. Success will depend on the confidence schools have in the potential savings, their willingness to take on new debt during tough economic times, and whether they were already planning improvements. 1/28 AP



Monthly Special Feature...

ZigBee Light Link: LED Lighting Control Standardized - San Ramon, Calif. – Jan. 4, 2012 – The ZigBee® Alliance, a global ecosystem of companies creating wireless solutions for use in energy management, commercial and consumer applications, today announced it is developing a new open standard designed for LED lighting control – ZigBee Light Link™. This forthcoming standard will help manufacturers develop a variety of lighting and control products, giving resellers and consumers a wide selection of interoperable wirelessly controlled lighting products for the home.

The Alliance is creating a standard that will be as easy to use as a common dimmer switch. Light bulbs, LED fixtures, sensors, timers, remotes and switches built using ZigBee Light Link will not require special devices to coordinate in a home's network. Consumers will be able to easily install and add extra devices to their home lighting network. Like all devices in the ZigBee portfolio, ZigBee Light Link devices can be controlled over the Internet through connected computers, tablets and smart phones. Development of this standard is being steered by industry-leading lighting experts such as GE, Greenwave Reality, OSRAM Sylvania and Philips.

“ZigBee Light Link will be the industry-wide solution for the home market,” said Jos Bruins, ZigBee Light Link working group chair from Philips. “ZigBee Light Link is being vigorously tested and will provide the simplicity consumers need and the helpful features they've been hoping the industry would develop.”

Products built using ZigBee Light Link can earn the ZigBee Certified product seal. When completed, this open standard will be one of the industry's first standardized wireless networking solution for interoperable lighting applications between different manufacturers.

“Having so many lighting industry heavyweights working together to leverage the benefits of ZigBee for ZigBee Light Link will help consumers realize the convenience of standards-based wireless lighting control,” said Bob Heile, chairman of the ZigBee Alliance. “ZigBee Light Link will give consumers a simple way to control lighting from anywhere in their home, or even if they're at work or on vacation.”

Since ZigBee Light Link will be an interoperable ZigBee standard, lighting products using this standard will work together and coexist with other ZigBee standards already in consumers' homes. To see more information about the benefits and features of ZigBee Light Link and download, visit:

www.ZigBee.org/LightLink

ZigBee: Control your world











ZigBee offers green and global wireless standards connecting the widest range of devices to work together intelligently and help you control your world. The ZigBee Alliance is an open, non-profit association of approximately 400 members driving development of innovative, reliable and easy-to-use ZigBee standards. The Alliance promotes worldwide adoption of ZigBee as the leading wirelessly networked, sensing and control standard for use in consumer, commercial and industrial areas. For more information, visit: www.ZigBee.org

<http://www.zigbee.org/Default.aspx?Contenttype=ArticleDet&tabID=332&moduleId=806&Aid=360&PR=PR>










Monthly Special Feature... http://www1.eere.energy.gov/buildings/ssl/tech_reports.html

The US DOE has released technical reports describing the changes in the installed lighting market in the US over the last decade by technology and sector. It contains links to technical reports of studies estimating the energy savings potential of solid-state lighting in numerous applications.

- [Energy Savings Potential of Solid-State Lighting in General Illumination Applications](#)
Report forecasting the energy savings potential of LED white-light sources compared to conventional white-light sources. Estimate uses an econometric model of the U.S. national lighting market that relies on assumptions of projected efficacy, retail price, and operating life based on work conducted collaboratively by DOE and industry experts, including members of the Next Generation Lighting Industry Alliance. (84 pages, January 2012)
 - [Report Summary](#)
- [2010 U.S. Lighting Market Characterization](#)
Detailed estimates of the national inventory of installed lamps, their performance characteristics, associated energy use, and lumen production in four sectors: residential buildings, commercial buildings, industrial buildings, and outdoor. (100 pages, January 2012)
 - [Excel workbook](#) containing all data provided in the LMC report
 - [Report Summary](#)
- [Energy Savings Estimates of Light Emitting Diodes in Niche Lighting Applications](#)
Report estimating LED energy savings in 12 markets where LEDs compete or are poised to compete with traditional lighting sources such as incandescent, halogen, high intensity discharge (HID), and certain types of fluorescent. The analysis includes general illumination, outdoor lighting, and consumer electronic display applications. (88 pages, January 2011)
 - [Report Summary](#)
- [Energy Savings Potential of Solid-State Lighting in General Illumination Applications 2010 to 2030](#)
Report estimating national energy savings that could be realized through the market penetration of energy-efficient solid-state lighting if the technology achieves certain forecasted price and performance objectives. Estimate is based on a model of the U.S. national lighting market - considering various lighting technologies, end-use sectors, and end-use applications within those sectors - and presents input assumptions, the methodology, and the findings of this analysis. (54 pages, February 2010)
 - [Report Summary](#)
- [Revised Report - Energy Savings Estimates of Light Emitting Diodes in Niche Lighting Applications](#)
Report estimates LED savings in 12 niche markets where LEDs compete or are poised to compete with traditional lighting sources (e.g., incandescent and fluorescent); analysis includes colored-light applications, indoor white-light applications, and outdoor white-light applications. (104 pages, September 2008, Revised October 2008)



- [Errata from the September 2008 Niche Report](#) 
- [Energy Savings Potential of Solid-State Lighting in General Illumination Applications](#) 
Study estimating national energy savings that could be achieved if white-light, solid-state lighting devices (LEDs, OLEDs) follow projected price and performance targets. Estimate is based on an econometric model of the U.S. lighting market in which solid-state and conventional technologies (incandescent, fluorescent, HID) compete for available sockets (50 pages, December 2006)
- [Compact Fluorescent Lighting in America: Lessons Learned on the Way to Market](#) 
Analysis of the market introduction of compact fluorescent lighting in the U.S., with emphasis on identifying lessons that could be applied to other new lighting technologies, such as solid-state lighting (92 pages, June 2006)
- [U.S. Lighting Market Characterization, Volume II: Energy-Efficient Lighting Technology Options](#) 
Study presenting fifty-two lighting technology options that promise to save energy or demonstrate energy savings potential. For each option, this report provides a brief technical description, describes the energy savings principle, estimates the technical-potential energy savings, discusses promising applications and provides other details and information relevant to the technology (286 pages, September 2005)
- [Energy Savings Potential of Solid-State Lighting in General Illumination Applications](#) 
Study estimating energy that could be saved if white-light, solid-state lighting devices (LEDs, OLEDs) were to achieve projected price and performance targets; based on econometric model in which solid-state and conventional technologies (incandescent, fluorescent, HID) compete for available sockets in U.S. market (49 pages, November 2003)
- [Energy Savings Potential of Light Emitting Diodes in Niche Lighting Applications](#) 
Study estimating energy saved in 2002 by using LEDs in place of incandescent and other light sources in colored-light niche applications (e.g., exit signs, traffic signals, motor vehicle signals, airplane taxiway edge-lights) (114 pages, November 2003)
- [U.S. Lighting Market Characterization, Volume I: National Lighting Inventory and Energy Consumption Estimate](#) 
Inventory of installed U.S. lighting technologies for 2001 and associated energy consumption, addressing what lighting technologies are installed and where, and their performance attributes (120 pages, September 2002)
- [U.S. Lighting Market Characterization, Volume I, Appendices H, I and J](#) 
Three appendices to U.S. Lighting Market Characterization, Volume 1, detailing the statistical analysis done to extrapolate building audits conducted during the 1990s to provide estimates for 2001 (206 pages, September 2002)
- [U.S. Lighting Market Characterization, Volume I](#) 
PDF version of Excel workbook containing all data provided in U.S. Lighting Market Characterization, Volume 1 (78 tables, September 2002)

