

Grüv ActiveCLEAN Family

ActiveCLEAN's high-intensity, antimicrobial wavelengths of 405 nanometers protect your business with the most beautiful, comfortable, non-glare illumination. Utilizing VyV's signature UV-free antimicrobial technology, our spec-grade (Linea or Gruv) family of luminaries provides continuous surface cleaning by creating spaces that are inhospitable for bacteria, fungi, yeast, mold, mildew and viruses to live, on any surface—and in any application—the light touches. For standard GRUV products click these links: [GRUV 1.5](#), [GRUV 2.5](#), [GRUV 4](#), [GRUV-FR](#) For "How To Use" information and "Application Guide" [click here](#)



Linea ActiveCLEAN Family

ActiveCLEAN's high-intensity, antimicrobial wavelengths of 405 nanometers protect your business with the most beautiful, comfortable, non-glare illumination. Utilizing VyV's signature UV-free antimicrobial technology, our spec-grade (Linea or Gruv) family of luminaries provides continuous surface cleaning by creating spaces that are inhospitable for bacteria, fungi, yeast, mold, mildew and viruses to live, on any surface—and in any application—the light touches. For standard Linea products click these links: [Linea 1.5"](#), [Linea 2.5"](#) For "How To Use" information and "Application Guide" [click here](#)

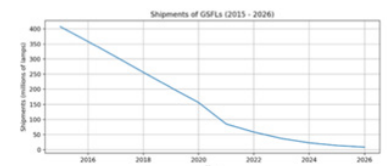


National LED Energy Market Observer:

1. Policy Ushers Smart Lighting Technology to Center Stage - Within the DOE's order specific to light bulbs, there are three set rules: 1) Lamps must deliver a minimum of 45 lm/W efficacy; 2) old lamps that don't meet the new standard will need to be phased out of production within 75 days; and 3) full enforcement of the rule will go into effect in July 2023. This direction from the federal government will effectively phase out the sale of incandescent lamps by the year 2023. Color quality, connectivity, and controllability are intertwining factors that will influence the uptake of LEDs while spurring further innovation. [Policy ushers smart lighting technology to center stage | LEDs Magazine](#)

Shipments

- DOE projects that by the assumed compliance year, only a fraction of historical GSFL shipments remain.
 - Estimates of linear lamp shipments from 2015-2020 are based on NEMA Lamp Sales Indices.



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U.S. Department of Energy
ENERGY Energy Efficiency & Renewable Energy

2. DOE & NEMA Projections on General Service Fluorescent Lamps (GSFLs) - GSFL (linear fluorescent lamps) shipments in the US declined 85% between 2015 and 2022, from roughly 400 million lamps in 2015, down to about 60 million this year. This estimate is based on NEMA Lamp Sales Indices (2015-2020). DOE further projects GSFL shipments to decline to roughly 2% of 2015's number by 2026 (400 million lamps in 2015 down to less than 10 million lamps in 2026). [DOE Linear Fluorescent Lamp Shipments estimates](#)

3. NEMA: The Economic Impact of America's Electroindustry - [The National Electrical Manufacturers Association \(NEMA\)](#) launched a new website highlighting the electroindustry's economic impact. The website features data from a landmark independent economic analysis that reports the contribution of the electroindustry to jobs, the economy, and labor income and utilizes a mapping tool to display the data in each state and congressional district. The analysis finds that the U.S. electroindustry is responsible for 1.65 million American jobs and contributes more than \$202 billion annually to the economy, based on data from 2020. Those jobs generated more than \$129 billion in labor income in 2020, supporting communities across America. The report finds that electrical and medical imaging manufacturers operate plants and facilities in nearly every state and pay wages that are above average, providing a tax base that supports services in towns and cities, and rural areas across the U.S. [the U.S. – NEMA Economic Impact](#)



4. **LEDs Now Nurturing Hydroponics on the Space Station** - NASA has found another way to experiment with LED grow lights on the International Space Station, as it has installed a hydroponic and aeroponic system that taps the LEDs already in place in the craft's Veggie racks. The new "XROOTS" gear arrived on a cargo delivery in February and is now cultivating vegetables such as mizuna greens and radishes inside one of the two Veggie chambers on the ISS. Veggie is the general set of grow lights and apparatus that has been onboard since 2014. The ISS houses at least two Veggies and is likely still using [the "PONDS" nutrient delivery system](#) in the other. Astronauts use the Veggie chamber to grow their own edible greens and help research the growth of plants in space, which in turn can provide insights for growth on Earth. [LEDs now nurturing hydroponics on the Space Station | LEDs Magazine](#)

5. **LM&M Magazine - A Must-Read in the Lighting Industry** - LM&M, the official NALMCO publication, provides information on the latest industry trends and developments in planned lighting maintenance and lighting technology — content that's beneficial for NALMCO members as well as owner-occupiers and other industry professionals. Although Lighting Management & Maintenance (LM&M) is a NALMCO publication, you don't have to be a NALMCO member to appreciate its content. If you're part of a NALMCO member company, you can get your own subscription. It's FREE! You can also share LM&M with others by signing up a customer or friend in the industry. [LM&M - EdisonReport Subscription Information \(nalmco.org\)](#)



6. **Resilient Harvests Conference Announces Two Keynote Speakers** - LEDs Magazine's parent company, Endeavor Business Media, and Resource Innovation Institute executive director Derek Smith have announced two key thought leaders presenting the keynotes at the inaugural Resilient Harvests Conference this September. California Energy Commissioner Andrew McAllister and Ohio Controlled Environment Agriculture Center director Chieri Kubota are expected to share agency activities in rolling out strong clean-energy policy helping to shape the future of California environmental, sustainability, and efficiency regulations through statewide programs. Leveraging decades of energy efficiency expertise, McAllister is leading the CEC's charge to establish a global starting point for controlled environment agriculture energy guidance with the addition of [California's Title 24, Part 6, Energy Code for Controlled Environment Horticulture](#) in January 2023. [Visit the Resilient Harvests Conference website](#) for registration information. [Resilient Harvests Conference announces two keynote speakers | LEDs Magazine](#)

7. **Mega Project Mania: Epic Electrical Construction Opportunities** - Despite supply chain issues, worker shortages, and a slow recovery from the COVID-19 pandemic, there's still an impressive array of mega construction projects valued at more than \$500 million underway or on the drawing boards. Much of the action is in the new construction of electric-vehicle (EV) manufacturing plants, EV battery plants, and data centers. [Let's take a look](#) at the mega projects that will provide the most revenue opportunities for the electrical construction market in the near future. [Home | EC&M \(ecmweb.com\)](#)

8. **First Products Qualified Under DLC's New LUNA Technical Requirements** - The [Design Lights Consortium \(DLC\)](#) today announced the first products added to its [LUNA Qualified Products List \(QPL\)](#) after being tested and determined to meet the new [LUNA Version 1.0 Technical Requirements](#) for outdoor LED luminaires. The DLC released LUNA V1.0 in December and began accepting applications from solid-state lighting (SSL) manufacturers interested in qualifying their products in April. Searchable on the [SSL Qualified Products List \(QPL\)](#), LUNA-qualified products are eligible for energy efficiency rebates and incentives designed for SSL V5.1 products. LUNA sets performance requirements for specific categories of outdoor LED fixtures, so that municipalities, energy efficiency programs and other outdoor lighting decision-makers can better support their energy reduction goals and abide by dark sky policies and ordinances. The DLC notes, however, that the technical requirements apply only to white-light LED outdoor products. [First Products Qualified Under DLC's New LUNA Technical Requirements - lightED \(lighted-mag.com\)](#)

9. **Horticultural Lighting Market Ready to Grow by Rick Laezman** - Horticulture lighting is expanding globally. Two studies project rapid growth in the industry over the next several years. [The Horticulture Lighting Market Research Report](#), published in March 2021, by Market Research Future, and the more recent [Horticultural Lighting Market](#), published in March 2022, by Markets and Markets, identify a number of factors contributing to worldwide growth in using lighting to propagate plants in an indoor environment. City and indoor farming are replacing traditional practices as more viable alternatives. The need to cut costs and increase convenience, combined with greater disposable income, are also encouraging greater use of horticultural lighting. Finally, the rapid growth of cannabis farming is increasing the demand for new technology. Applications include greenhouses, vertical farming, indoor farming and others. The reports look at all these segments and sub-segments in their analyses. [Horticultural Lighting Market Ready to Grow | Electrical Contractor Magazine \(ecmag.com\)](#)



10. **Big Activity with U.S. Computer Chip Manufacturing by David Shiller** - Many LED drivers, luminaire controllers, and lighting control systems rely on computer chips. The COVID-19 pandemic created major disruptions to the global computer chip supply, affecting everything from cars to computers to all types of consumer electronic products.

- 1) **THE CHIPS AND SCIENCE ACT OF 2022** - Last week, the U.S. House and Senate each passed the CHIPS and Science Act, which provides \$52 Billion to boost domestic production of computer chips
- 2) **INTEL PLANT** - In January of this year, Intel announced plans for a new \$20 Billion computer chip manufacturing hub near Columbus, OH.
- 3) **SAMSUNG PLANT** - In November 2021, Samsung announced its plan to build a \$17 Billion computer chip factory, outside Austin, TX.

The three actions above represent \$89 Billion of new investment in the US semiconductor production industry. This will boost the US economy and reduce computer chip costs, impacting countless industries, including automotive, computers, consumer electronics, IoT, and lighting. [Big Activity With U.S. Computer Chip Manufacturing | LightNOW \(lightnowblog.com\)](#)

11. **Controlled Environment Agriculture Lighting Best Practices Guide** - Any grower can turn on a light, but operating lighting for cultivation applications can be an art, while using lighting equipment efficiently can be a science. The purpose of this LED Lighting Best Practices Guide is to support you, the cultivator, and your design, construction and operations professionals with:

- Speaking the language of horticultural lighting
- Reviewing manufacturer's literature to evaluate your purchasing options
- Understanding crucial considerations when selecting LED lighting
- Installing and operating successful LED lighting solutions in alignment with your business model

[Download the free best-practices guide](#) from the Resource Innovation Institute website, and [register for the Resilient Harvests Conference](#).



12. **TRAINING: ALA to Host Virtual Residential Lighting Training Course This September** - ALA's popular training course, designed to help members earn their Lighting Specialist accreditation, will be held this September through a series of live, virtual classes. The course will be taught by renowned instructor Joe Rey-Barreau, AIA, IES. The course will consist of virtual meetings held over four days in September. Each day there will be two, live Zoom sessions led by Rey-Barreau. Each session will be recorded for students to revisit materials. Additional study time and reading are recommended for the class. Following the course, the online Residential Lighting Exam will be taken on the student's time. In order to earn the Lighting Specialist accreditation, the student must pass the exam with an 80 percent. The live courses will be held over Zoom on Sept. 20, 23, 27, and 30, from 10 a.m. to 12 p.m. and 2:30 p.m. to 4:30 p.m., Eastern Time. All ALA members are welcome to take the course, which costs \$575 per participant, along with a \$359 fee for the [Residential Lighting Training Manual](#). Members can [register online here](#).

13. **Lighting the Way for Savings: Controls Facilitate Widespread Lighting Efficiency by Susan DeGrane** - Do lighting controls save on electricity? Absolutely. The average reduction in electrical use for lighting after installing networked lighting controls is 49%, according to a September 2020 report by DLC and the Northwest Energy Efficiency Alliance. At the low end of the energy-savings spectrum for networked lighting controls, lighting-related energy use plummets 28% for buildings where people assemble for entertainment or public activities and 40% for manufacturing facilities, according to DLC. Office settings with networked lighting controls have the potential to cut lighting-related energy use by as much as 64%. [Lighting the Way for Savings: Controls facilitate widespread lighting efficiency | Electrical Contractor Magazine \(ecmag.com\)](#)

14. **CASE STUDY: Alberta Bair Theater Updates Lighting, Sees Growth** - Alberta Bair Theater in Billings, MT <https://www.albertabairtheater.org/> is an old Fox Theater built in 1931, the last of the Fox Corporation's vaudeville and motion picture houses to be constructed before the Great Depression. A renovation sought to restore the pageantry of the theater while boosting its infrastructure to support more substantial productions. The \$13.6 million renovation included the expansion of the lobby and box office, an elevator and enhanced lighting and technology in the main theater itself. Choosing optimal lighting for the lobby and main staircase was key. Cushing Terrell designers had worked through many iterations with the theater's board, but when Eureka released its Drop Celeste fixture, the design team was elated to find the perfect solution for Alberta Bair Theater. [Alberta Bair Theater Updates Lighting, Sees Growth - Facility Management Lighting Quick Read \(facilitiesnet.com\)](#)

15. **DOE Reports Examine the State of Current Commercial UV LEDs** - The COVID-19 pandemic has put a spotlight on germicidal ultraviolet (GUV) radiation for air and surface disinfection. This technology area represents a growing opportunity to improve indoor air quality while saving energy over high-ventilation approaches. The U.S. Department of Energy has released two reports aimed at understanding the current status of commercial ultraviolet (UV) LEDs.

- Initial Benchmarks of UV LEDs and Comparisons with White LEDs focuses on the construction and initial performance of commercially available UV LEDs.
- Operating Lifetime Study of UV LED Products focuses on the long-term performance and reliability of the same set of LEDs. Results from stress testing, along with an extensive literature review, identified specific failure mechanisms and opportunities for improvement across these UV LEDs.

[DOE Reports Examine the State of Current Commercial UV LEDs | Department of Energy](#)

16. **New Study Shows Innovative LED Lighting System Cuts Risk of Seniors Falling in Long-term Care Facilities by 43 Percent** - A first-of-its-kind, two-year study conducted by investigators at Brigham and Women's Hospital and the [Midwest Lighting Institute \(MLI\)](#), showed a significant 43 percent reduction in the rate of falls in residents at long-term care facilities that utilized a tunable LED lighting system compared to control facilities that maintained standard lighting. The lighting was operated on a schedule developed by Midwest Light Institute that implements specific spectrum and intensity levels timed to regularize sleep-wake cycles and boost the daytime alerting effects of light. The [results](#) were published in the Journal of the American Medical Directors Association (JAMDA). Falls are the leading cause of injury-related death in U.S. adults aged 65 and older. Research has shown that blue-enriched, higher intensity light exposure during the day can improve alertness, cognition, and subsequent nighttime sleep. [New Study Shows Innovative LED Lighting System Cuts Risk of Seniors Falling in Long-term Care Facilities by 43 Percent \(prnewswire.com\)](#)

17. **RESEARCH: PNNL Explores Patient Room Tunable Lighting from Patient's Perspective** - In healthcare settings, tunable lighting systems can save energy and support the well-being of patients, staff, and visitors. By changing spectrum and intensity throughout the course of the day, these systems provide benefits for visual and other biological responses to light. To fully realize these benefits, the Pacific Northwest National Laboratory (PNNL) pursues better understanding of occupant preferences and responses to tunable lighting systems through observational research. Key findings include:

- Participants showed a strong preference for lighting conditions where light was applied in multiple zones across the room instead of a traditional over-bed configuration.
- Participants reported that conditions with CCTs of 5000K and higher were less comfortable and less natural than conditions with lower CCTs.
- Colored lighting on the footwall of the room received a negative reaction.
- A mixture of warmer and cooler luminaire CCTs in different patient room zones was deemed acceptable.

Advanced lighting technologies allow for much greater flexibility, and this research provides important feedback for lighting specifiers and manufacturers regarding the intensity, color, and distributions of light that patients find agreeable. [PNNL Explores Patient Room Tunable Lighting from Patient's Perspective \(lightingcontrolsassociation.org\)](https://lightingcontrolsassociation.org)

18. **A Broad Spectrum of Office Lighting: Illuminating Well-Being at the Workplace by Claire Swedberg** - As workers return to the office, companies are striving to make spaces healthier and more comfortable by creating work areas based on good ventilation, comfortable design and healthy lighting. This offers electrical construction and integration opportunities as building owners re-examine existing lighting and HVAC to meet workers' needs. Returning to the office means workers are now comparing the environment around their desk with that of their own home. Building owners are striving to meet the challenge with the best features of a public and communal workspace, with a healthier and more natural environment. Lighting can help because luminaires can do things today that weren't possible in the past, Michael Siminovitch, director of the California Lighting Technology Center said, with solid-state technology and the introduction of controls for energy savings. [A Broad Spectrum of Office Lighting: Illuminating well-being at the workplace | Electrical Contractor Magazine \(ecmag.com\)](https://ecmag.com)

19. **MDM 2022 Top Distributors List** - Download the official easy-to-reference report that includes the rankings of the 150+ largest distribution companies across 17 key categories, including industrial, electrical and building/construction. Plus you'll get executive editor Mike Hockett's exclusive analysis of the factors that affected the movements in this year's top list. This is the only ranking of all the top companies by category in the industry. [MDM-2022-Top-Distributors](#)



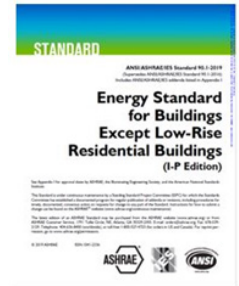
20. **FDA Counsels Consumers Against Specific UV Disinfection Wands** - In late July, the U.S. Food and Drug Administration issued a safety alert advising consumers of safety risks associated with specific brands of portable ultraviolet devices claimed to disinfect objects and surfaces. To date, seven manufacturers have received FDA warnings that portable GUV products exhibited defects that render them unsafe by "presenting a risk of injury to the user and nearby persons." [FDA counsels consumers against specific UV disinfection wands | LEDs Magazine](#)

1. In My Bathroom LLC, "dba" IMB
2. Magic UV Light Sanitizer
3. Max-lux Corporation
4. MerchSource LLC
5. OttLite Technologies Inc.
6. PhonoSoap LLC
7. Vanelc

21. **Linux Adds Drivers for PureLiFi** - The organization that updates the Linux operating system has added software drivers to support Li-Fi from pureLiFi, which could bring pureLiFi closer to embedding technology in smartphones, tablets, and other devices. The Android operating system, popular on phones, is based on Linux. By adding the drivers to the Linux Kernel in the latest release — version 5.19 — the San Francisco-based Linux Kernel Organization should make it easier for gadget makers to embed Li-Fi receivers and transmitters. Today, users have to attach dongles to their devices. Li-Fi is a Wi-Fi-like transmission that uses modulated light waves or infrared waves rather than the radio waves (RF) of Wi-Fi. If nothing else, it could help alleviate the crowded Wi-Fi spectrum. Inclusion in Windows and Apple operating systems would be a boon, when and if that happens.

[Linux adds drivers for pureLiFi | LEDs Magazine](#)

22. **DOE Recognizes 90.1-2019 as National Energy Standard** - Next year, the 2019 version of ANSI/ASHRAE/IES 90.1, Energy Standard for Buildings except Low-Rise Residential Buildings, takes effect as the national energy reference standard. This is based on a July 2021 Department of Energy (DOE) ruling that determined the standard saved more energy than the preceding 2016 version. By July 28, 2023, all states must adopt a commercial building energy code at least as stringent as the standard, or justify why they cannot comply. What does this mean in your jurisdiction? ASHRAE/ANSI/IES 90.1-2019 is available at the ASHRAE bookstore [Standard 90.1\(ashrae.org\)](#)



23. **Construction: The Costs Keep Climbing** - Even as some parts of the economy are supposedly improving, with maybe inflation growth showing signs of slowing in the U.S., the state of commercial construction is painful, according to an analysis from construction consultancy Rider Levett Bucknall. A graph of their data through mid second quarter of 2022 shows that if anything, the speed of growth for costs, indexed to April 2001, has gotten faster. [Construction: The Costs Keep Climbing | GlobeSt](#)

Global LED Energy Market Observer:

24. **Signify's New A-Class LED Tube: An Innovative Solution for Rising Energy Prices** - [Signify](#) has expanded its Ultra Efficient product lineup with its most energy-efficient LED tube to date. Thanks to its high efficacy, the Philips MASTER LEDtube UE can help customers tackle the global energy crisis, mounting pressure to lower carbon footprints, and stricter EU regulation. Signify last year broke new ground with the launch of the Philips LED A-class bulb, which consumes 60% less energy than a standard Philips LED. The MASTER LEDtube UE continues this technological innovation to expand the portfolio of energy-efficient products, which meet the A-grade criteria of the new EU energy labeling and eco-design framework. Under these updated rules, lighting products need energy efficiency of at least 210 lm/W to receive an A grade, the highest rating. [Meet our new A-class LED tube | Signify Company Website](#)

25. **The Other Side of UV: It Grows Things, Too** - Ever since the outbreak of the global health pandemic, most of the “ultra-violet” talk in the lighting industry has centered around using the UV spectrum to eliminate or deactivate pathogens such as the SARS-CoV-2 virus, and which is unable to replicate when exposed to the C-band of UV. But a partnership that horticultural lighting company Fluence recently struck reminds us that UV can nurture things too. Austin, Texas-based Fluence has teamed with New Zealand-based agricultural technology specialist BioLumic to deliver UV recipes, developed by BioLumic, via Fluence lighting hardware and systems. In a joint announcement, the two companies noted that UV can improve plant yields, health, and quality when applied during the propagation stage of plant growth. The companies said they will initially work with cannabis cultivators. [The other side of UV: It grows things, too | LEDs Magazine](#)

26. **Bringing the World Cup to Light: Emergency Lighting for the Ras Abu About Stadium** - When plans for the stadium began in 2020, UK lighting manufacturer [Mackwell](#) was involved right from the start alongside its partner, [Archilum](#) Lighting, Mackwell's Dubai-based expert in lighting solutions. Mackwell provided more than 4,000 different luminaires for the project, ranging across eight different product families that catered to the specific requirements of all areas within the Ras Abu About stadium. From emergency luminaires to exit signs, all installations were equipped with interfaces to other building management systems. The overall deployment came with the added benefit of providing an equally aesthetic and compliant emergency lighting system to help ensure the safety of both visitors and workers alike. Having started the initial emergency lighting layout designs back in September 2020, all installations were finalized and complete in Q1 2022, well ahead of the kick-off for the World Cup in November 2022 in Qatar. [Bringing the World Cup to Light: Emergency Lighting for the Ras Abu About Stadium | EC&M \(ecmweb.com\)](#)

27. **RESEARCH: Ambient Lighting Market Set to Grow by \$27 Billion** - Research and Markets has unveiled in their Global Ambient Lighting Market 2022-2026 report that the market is set to grow by \$27.14 billion at a CAGR of 8.86%. Government initiatives towards energy savings and a consumer focus on interior design, architecture and smart-city developments are some of the primary reasons for the forecasted growth. The report covers full trends, growth drivers and challenges to the market segmented by products and geographical locations. Products are broken into lamps and luminaires; lighting controls and surface-mounted lights. The report additionally covers a robust vendor analysis including approximately 25 vendors. Visit www.researchandmarkets.com to read the report.

28. **Could Sustainable Lighting Product Regulations Be Coming to North America?** - But what would sustainable product regulations look like? The European Union (EU) is far ahead of North America on sustainable product regulations, and a look at what the EU is doing gives one vision of where sustainable product regulations could go in North America. Here is a [synopsis](#) of the EU approach, from the National Law Review, in April: The Commission aims at “[making sustainable products the norm](#)” and reducing negative life cycle environmental impacts of products, while benefitting from efficient digital solutions, by setting a framework for Ecodesign requirements, creating an EU digital product passport and tackling the destruction of unsold consumer products. [Could Sustainable Lighting Product Regulations Be Coming to North America? | LightNOW \(lightnowblog.com\)](#)

29. **RESEARCH: Market Data: Energy Efficient Lighting for Commercial Markets by Guidehouse Insights** - LED, Fluorescent, HID, Halogen, and Incandescent Lamps and Luminaires in Commercial Buildings: Global Analysis and Forecasts. The performance of LED lighting products has improved dramatically over the past 15 years. Simultaneously, prices have declined, making the financial case for LED lighting compelling and leading to widespread adoption in commercial buildings. Though LED lighting systems have become the default choice for new construction and retrofit lighting installations, a sizable global installed base of legacy lighting products remains, fostering continued non-LED lamp sales for replacement of failed lamps. This Guidehouse Insights report examines the global market for energy efficient lighting in commercial buildings (office, retail, education, healthcare, hotels & restaurants, institutional/assembly, warehouse, and transport). Market trends, drivers, and barriers are explored, with particular emphasis on the changing regulations affecting the lighting industry. Global market forecasts for lamp and luminaire unit shipments and revenue extend through 2031. [Market Data: Energy Efficient Lighting for Commercial Markets \(guidehouseinsights.com\)](#)

30. Fluence and REMY LED Lighting Collaboration Flourishes at Leading Israeli Cannabis Farms - Fluence Bioengineering, Inc. (Fluence), a leading global provider of energy-efficient LED lighting solutions for commercial cannabis and food production, in collaboration with REMY, a horticultural lighting provider to Israel's growing agriculture industry, is supporting the record introduction of lighting technology solutions to Israel's medical cannabis facilities. Israel—considered a world leader in cannabis research, cultivation and advanced regulation—has positioned itself at the forefront of the global cannabis market through highly innovative technology and data applications. The country now boasts supply capabilities that surpass its domestic demand. REMY's expertise, paired with Fluence's products and evidence-based best practices for optimal lighting strategies at each phase of cannabis growth, has placed the companies' collaborative designs in the three core categories of medical cannabis facilities in Israel: greenhouse, indoor and vertical farms. [Fluence and REMY LED Lighting Collaboration Flourishes at Leading Israeli Cannabis Farms - LEDinside](#)

31. Nichia Expands the Hortisolis™ LED Portfolio, the Most Suitable LEDs for Plant Growth - Nichia announces additions to the Hortisolis™ portfolio dedicated to plant growth, including new high output COB options and also the high luminous flux density Direct Mountable Chip Series. By integrating only the light necessary for plant growth in one LED through the delicate combination of phosphors, Hortisolis™ makes it possible to maximize the production efficiency per area of the artificial farm while providing a good working environment in the artificial farm. By broadening the Hortisolis™ portfolio, customer options can be expanded and widely used for various fixture types. [Nichia expands the Hortisolis™ LED portfolio, the most suitable LEDs for plant growth - LEDinside](#)

Monthly Feature:

EV Chargers and Electric Vehicles are Taking Center Stage -

Car-Charging Investment Soars, Driven by EV Growth and Government Funds - More than \$4.8 billion has been pumped into the electric-vehicle charging industry this year — a combination of roll-out announcements, debt financing, investment and acquisitions. And this is just the deals that have disclosed financial figures. The analysis forecasts over \$360 billion in investment in charging by 2030, with more than half of the investment going toward fast charging. Explosive growth is still required to go from single-digit billions of investment today to hundreds of billions worth of investment over the next two decades. [Electric Car-Charging Investment Soars Driven by EV Growth, Government Funds - Bloomberg](#)

Federal Tax Credit for EV Chargers Renewed - The recently passed Inflation Reduction Act (IRA) has been making headlines over the past few weeks. While the legislation has been covered heavily in the media, most publications have glossed over the reinstatement of the tax credit for EVSE equipment. They instead focused on the tax credits for electric vehicles (EVs), increased funding for IRS enforcement and prescription drug cost caps. But this renewed incentive also presents a huge opportunity for anyone looking to install EV charging equipment. It extends and improves the previous tax credit available to businesses and residences. With the passage of the IRA, the federal tax credit for EV chargers, commonly referred to as the 30C Tax Credit, has been extended until December 31, 2032. [Federal Tax Credit for EV Chargers Renewed \(briteswitch.com\)](#)

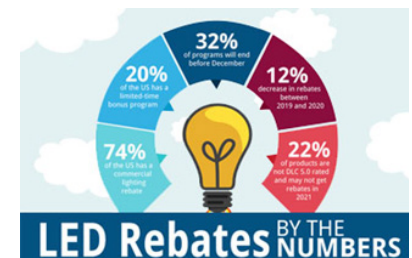


Senate Offers \$3B for Electric Trucks at Postal Service - The Senate has offered \$3 billion in the Inflation Reduction Act for the Postal Service to adopt electric trucks. The funding comprises \$1.29 billion for truck purchases and \$1.71 billion for installation of electric-vehicle infrastructure at Postal Service locations. [Senate calls USPS bluff with \\$3 billion for electric trucks – will it go 100% BEV? | Electrek](#)

Warehouses are Turning to EV Charging - As the push to electrify driving grows, warehouse developers are increasingly focused on charging. Companies seeking fully electrified fleets will need a place to charge up. The warehouse makes the most sense considering our nation's highways still have a ways to go in terms of charging stations. As of January 2022, there were approximately 113,600 charging outlets for plug-in EVs in the US. A good chunk of these is found in California, home to 41,300 private and public power outlets. Contrast this with China which has built out 800,000 across the country. From a shipping perspective, time is critical. For truckers accustomed to a quick diesel re-fuel, entry-level chargers today require up to six hours to reload a van, not to mention heavy-duty trucks. Depending on the size and specifications of the battery, top-of-the-line chargers can get a van's battery at least 80% charged in 30 minutes. [Warehouses are Turning to EV Charging - Global Trade Magazine](#)

Invisible Urban Charging Rolls Out 6,000+ EV Chargers in Florida - [Invisible Urban Charging \(IUC\)](#) recently announced that it is rolling out more than 6,000 chargers for electric vehicles (EV) into the State of Florida. Once fully deployed, IUC will have doubled the number of EV chargers in the State, making it the largest EV charger operator in Florida. The start-up's first deployment represents 5% of the total U.S. market. [Invisible Urban Charging Rolls Out 6,000+ EV Chargers in Florida | EC&M \(ecmweb.com\)](#)

BriteSwitch EV Chargers and Rebates (Infographic) - After months of record gas prices and an increasing number of electric vehicle (EV) options on the market, the demand for electric vehicle charging is stronger than ever. Businesses and homeowners around the country are trying to find ways to charge their new electric cars. Rebates and incentives play a crucial role in making these charging solutions affordable. You'll see a snapshot of the current rebate landscape for EV chargers. It's constantly evolving, but one thing is clear: the opportunity is huge. RebatePro for EV Chargers is a custom-built tool to help find and track rebates for EV chargers in both commercial and residential applications. It was designed from the ground up to reflect the unique way EV charging rebates work. It tracks [all five sources of EV charger rebates](#) and makes it easy to narrow down which would apply to a specific installation. [EV Chargers and Rebates \(Infographic\) \(briteswitch.com\)](#)



NJ Transit Gets \$44M to Build New Bus Terminal, Garage for Electric Buses - NJ Transit will receive one of 150 [Federal Transit Administration](#) grants — which together total \$1.6 billion — to tear down a decommissioned bus garage and build a new facility and terminal equipped to serve [the electric buses of the future](#). The state transit agency will receive a \$44.67 million grant to renovate the decommissioned Union City bus garage, announced by FTA officials on Tuesday and funded by [the \\$1 trillion bipartisan infrastructure law](#) signed last November. The program is funding the purchase of 1,800 buses total, 1,100 of them are “zero emission” electric or hydrogen powered. [NJ Transit gets \\$44M to build new bus terminal, garage for electric buses - nj.com](#)

NYC Rolls Out Plan to Increase EV Charging Stations - UK-based Connected Kerb has been selected to pilot a program in New York City aimed at increasing access to charging stations for electric vehicles. Goals include adding 10,000 curbside chargers by 2030 and electrifying a fifth of municipal parking bays by 2025. [IoT-enabled electric charging pilot to ramp up New York EV infrastructure \(smart-energy.com\)](#)

CTA, 4 Other Illinois Transit Systems Get Federal Funding for Bus Electrification - There was good news on Tuesday for the Chicago Transit Authority (CTA), as well as four other public transportation systems across Illinois, as the U.S. Department of Transportation's Federal Transit Administration today announced [\\$1.66 billion in grants to help electrify bus fleets](#) nationwide. The CTA received \$28.8 million in federal grants to help purchase electric buses. The CTA plans to purchase 10 electric buses, upgrade a garage and institute training on electric buses with the grant. The CTA will use \$3.4 million of the grant to buy 10 electric buses. Roughly \$13.2 million of the federal funding will go towards upgrading the CTA's Chicago Avenue Garage in Humboldt Park. [CTA, 4 other Illinois transit systems get federal funding for bus electrification - Streetsblog Chicago](#)

How the Electrical Contractor Can Win in the EV Space - An entire infrastructure is required to support EVs, including chargers, gear and components, as well as upgrades to the electric grid. In total, e-mobility is predicted to be a \$100 billion market in the U.S. by 2030. This is a once-in-a-generation opportunity with enormous revenue potential for electrical contractors (ECs). EVs create additive revenue opportunities for ECs in both residential and commercial markets. Understanding where these revenue opportunities lie—now and in the future—as well as their funding sources can help savvy ECs win new business. [From Grid to Charger \(omeclk.com\)](#)

SamTrans Replacing 30 Diesel Buses with Electric Buses - The San Mateo County Transit District (SamTrans) expects to fully convert its fleet to zero-emission buses by 2034, which is four years faster than the original 2038 projection following approval by the SamTrans Board of Directors to purchase 30 zero-emission buses to replace 30 diesel buses. The approved purchase includes a \$13.9 million contract with New Flyer of America for 10 hydrogen fuel cell electric buses and a \$22.8 million contract with Gillig LLC for 20 battery electric buses. The purchase of the buses is funded through a mix of federal, state and SamTrans sales tax funds. [SamTrans replacing 30 diesel buses with electric buses | Mass Transit \(masstransitmag.com\)](#)

RIPTA Unveils Rhode Island's First Electric Bus Fleet - RIPTA has received the first of 14 New Flyer Xcelsior CHARGE NG™ 40-foot battery-electric buses, with the remainder of the authority's order to be delivered in the upcoming months. This fleet of New Flyer Xcelsior electric buses will replace the current fleet of diesel buses that operate on the R-Line, RIPTA's most frequent and highest-ridership route, connecting Providence and Pawtucket. Each New Flyer Xcelsior CHARGE NG™ 40-foot heavy-duty transit bus costs \$1,072,551.13. Fleet funding was provided by the Federal Transit Administration, Volkswagen settlement funds and RIPTA capital funds.



[RIPTA unveils Rhode Island's first electric bus fleet | Mass Transit \(masstransitmag.com\)](#)

LAX Installing 1,300 EV Chargers - The installation, which should be complete by the end of the year, includes some fast chargers that can charge a car in 20 minutes and others that can take up to eight hours. The parking management and transportation services company working on the installation, ABM, says it will be one of the most extensive EV charging ports in the United States when complete. The LAX airport overhaul makes sense as California holds the largest EV market share, with over 1 million EVs sold. [LAX adds 1300 EV chargers in new revamp \(electrek.co\)](#) Typical rates to charge should be similar to the following:

- Tesla Model 3 around \$30
- Mustang Mach-E around \$34
- Hummer EV around \$95

California Set to Move Forward with Plan to Ban Sale of All Gas Cars by 2035 - California could be moving one step closer to banning the sale of gas vehicles by 2035, with the state's Air Resources Board (CARB) expected to vote in favor of such a plan Thursday. If passed, the regulation would operate in phases, with the amount of gas-powered vehicles on the road decreasing over time. 35% of new passenger vehicles sold would need to be powered by batteries or hydrogen in 2026, 51% by 2028, 68% by 2030, and 100% by 2035. In addition to these targets for regular passenger cars, the plan outlines a goal to have zero-emission medium and heavy-duty vehicles by 2045. [California set to move forward with plan to ban sale of all gas cars by 2035 \(msn.com\)](#)

State NEVI Plans Raise Concerns About EV Charging Infrastructure Rollout - Electric grid capacity, plus sourcing and funding mandates, are some of the states' worries about the National Electric Vehicle Infrastructure program. [State NEVI plans raise concerns about EV charging infrastructure rollout | Smart Cities Dive](#)