

[AVISTA by Amerlux](#) [amerlux.com](#)



Avista is an advanced LED light engine designed to retrofit traditional post top luminaires. The Avista family of LED retrofit light engines is designed for traditional post top luminaires and decorative pendants. The Avista TDL is specifically designed for Pendant or Teardrop type fixtures, but can also be configured into various other fixtures. All models feature a completely sealed LED optical chamber, and multiple horizontal distribution types in various light outputs and CCT's. A super-efficient, economical energy saver, Avista takes exterior LED lighting to the next level in both comfort and performance.

National LED Market Observer

1. **The AI Data-Center Boom Is Coming to America's Heartland** by Jennifer Hiller -

Meta and other tech companies are scouring rural America for land, transmission lines and natural gas. Meta Platforms scooped up 2,700 acres of farmland last year for what would be its largest-ever data center, built over flat rice fields 45 minutes west of the Mississippi River. At 4 million square feet, or 70 football fields, Meta's data center will cost \$10 billion and sit on more acreage than Louisiana State University in Baton Rouge, which has more than 34,000 students. Building advanced artificial-intelligence systems will take city-sized amounts of power, which has turbocharged electricity demand projections for the first time this century. [The AI Data-Center Boom Is Coming to America's Heartland - WSJ](#)



2. **OpenAI to Soon Offer Deep Research to All ChatGPT Users for Free** by Akshay Kumar -

Earlier in February, OpenAI introduced Deep Research, its new agentic capability in ChatGPT. The feature allows you to use artificial intelligence to compile factual information into detailed reports on any topic. So far, the advanced functionality of one of the world's most popular chatbots has only been exclusively available to Plus, Pro, and Enterprise subscribers. However, OpenAI is all set to offer the Deep Research AI agent to all ChatGPT users for free. Currently, you need to pay \$20 per month for the ChatGPT Plus subscription to use the Deep Research functionality. You can avail yourself of extended access to the feature by paying \$200/month for the ChatGPT Pro subscription. ChatGPT's Deep Research AI agent can do work for you independently. Once you give it a prompt, it will analyze and synthesize hundreds of sources online to make a detailed report at the level of a research analyst. You can think of it as your very own analyst who can go off on its own and report findings to you in a matter of minutes. It can also cross-verify the report against the millions of sites on the internet. [OpenAI to soon offer Deep Research to all ChatGPT users for free](#)

3. Google's Gemini Deep Research Is Now Available to Everyone by Igor Bonifacio - After being one of the first companies to roll out a Deep Research feature at the end of last year, Google is now making that same tool available to everyone. Starting today, Gemini users can try Deep Research for free in more than 45 languages — no Gemini Advanced subscription necessary. For the uninitiated, Deep Research allows you to ask Gemini to create comprehensive but easy-to-read reports on complex topics. Compared to say Google's new AI Mode, Deep Research works slower than your typical chatbot, and that's by design. Gemini will first create a research plan before it begins searching the web for information that may be relevant to your prompt. When Google first announced Deep Research, it was powered by the company's powerful but expensive Gemini 1.5 Pro model. With today's expansion, Google has upgraded Deep Research to run on its new Gemini 2.0 Flash Thinking Experimental model. [Google's Gemini Deep Research is now available to everyone](#)

4. How AI is Driving the Next Wave of Energy Innovation - Over the past two years AI has reigned in the minds of business leaders across the board. While some industries remain hesitant in embedding AI into their business, leaders from the energy sector have been more open to AI led transformation possibilities in their businesses. Several energy organizations across the world are methodically experimenting with AI to drive digital transformation, with the sector already seeing real business value from AI. According to the 'KPMG International's Global Tech Report: Energy insights', 67% of energy companies are achieving measurable impact from active AI use cases. A big advantage of the energy sector is that there is a lot of data available, much of which is in digitised form. This availability of structured data complements with the broader structured and unstructured data available from external sources, creating a rich base for action in the energy companies. As a result, AI adoption in the energy sector is moving beyond proof-of-concept. [Powering the Future: How AI is Driving the Next Wave of Energy Innovation](#)

5. The Push to Triple Global Nuclear Energy by 2050 - In recent years, the world has faced unprecedented growth in energy demand caused by digitalization, the development of artificial intelligence, electric vehicles, and other energy-consuming technologies. In an attempt to handle this challenge, Amazon, Meta, and Google — top stock gainers during previous years — as well as 14 leading banks and financial institutions, energy suppliers, and representatives of heavy industry, have joined forces to achieve the ambitious goal of tripling global nuclear power capacity by 2050. The World Nuclear Association initiated this program — for the first time, companies not directly involved in nuclear energy have publicly supported scaling nuclear power plants to meet their needs. [Powering the Future: The Push to Triple Global Nuclear Energy by 2050 - Programming Insider](#)

6. Gourma Chooses Sollum Technologies' Fully Dynamic LED

Lighting Solution - Sollum® announced its partnership with Gourma, a leading fine herb grower based in Saint-Norbert, Québec. Gourma offers 25 potted herb varieties, including nine that are certified organic. These aromatic herbs are distributed across Québec in the produce sections of grocery retailers, reflecting the quality and reach of their greenhouse production. In early 2023, Gourma undertook a major brand repositioning, doubled its production area, and adopted a forward-thinking vision focused on innovation. With the integration of Sollum's dynamic LED lighting solution, the company is now making a significant shift towards a fully controlled and adaptable lighting environment. This collaboration will enable Gourma to precisely tailor lighting conditions to the specific needs of its herbs, influencing key factors such as morphology, colour, and flavour. [\[News\] Gourma Chooses Sollum Technologies' Fully Dynamic LED Lighting Solution - LEDinside](#)



7. Foreign and Domestic Investments Totaling Over \$5T Under Trump, Adds 451k Jobs for Americans by Alec Schemmel - In total, through both domestic and foreign investments from four different countries, various U.S. industries and manufacturers have garnered roughly \$5.2 trillion in investments since January 20. In turn, these commitments are estimated to generate at least 451,000 new jobs for Americans. In total, the private sector has invested more than \$1.8 trillion in U.S. ventures. Meanwhile, foreign investments accounted for more than half of the U.S. total investments since Trump entered office – roughly \$3.3 trillion. Foreign investments in U.S. industries came from the United Arab Emirates, Japan, Saudi Arabia and India. [Private investments totaling over \\$5T under Trump, adds 451k jobs for Americans | Fox Business](#)

8. **AI Can't Predict the Impact of Tariffs—but It Will Try** by Isabelle Bousquette & Belle Lin - Companies are looking to technology to help navigate supply-chain uncertainty. Artificial intelligence was supposed to be a boon for helping companies navigate the impact of disruptions to their supply chains. But even this groundbreaking tech has its limits—and wasn't ready for the far-reaching, on-and-off tariffs from President Trump. Businesses contending with ongoing uncertainty want help from their supply-chain technology providers. In recent weeks, several vendors have rolled out AI features intended to gauge the impact of new tariffs. There is one problem: Tech can't forecast what Trump will do next. Even with AI, some businesses say technology won't help them avoid all tariff-induced financial pain. [AI Can't Predict the Impact of Tariffs—but It Will Try](#)

9. **GenAI in Procurement: from Buzz to Bottom-Line Cost Reductions** - Companies have made huge investments in AI, including generative AI (GenAI), and they're seeing sizable gains in productivity and efficiency. Yet many organizations struggle to translate those improvements into concrete financial savings. Procurement is one area where AI can swiftly reduce costs. Some procurement processes are repeated over time and quantifiable, generating a volume of data that AI can sift through to rapidly improve performance and lower costs. In Boston Consulting Group (BCG), work with companies, [procurement functions that use AI](#) can reduce overall costs by roughly 15% to 45% (depending on the category) and eliminate up to 30% of the work for employees and teams. Those gains enable companies to reallocate procurement team capacity to more strategic, value-added tasks.

10. **AI Is Enabling an Always-On Economy. Companies Need to Pick Up the Pace** by Steven Rosenbush - Intelligent agents make it easier for supply chains, logistics, cybersecurity, market research and more to operate 24 hours a day. Artificial intelligence is transforming businesses in an underappreciated way, extending the productive hours across various functions and industries. Companies need to start adapting for a world in which more markets operate 24 hours a day, much as trading does now. Those human constraints have often led to delayed decision-making and missed opportunities at all sorts of companies. The shift to an always-on economy isn't just about using AI to make predictions. It's about acting on them continuously. [AI Is Enabling an Always-On Economy. Companies Need to Pick Up the Pace.](#)

11. **91% of Global Executives Are Scaling Up AI Efforts** - New research reveals global leaders use AI for nearly half of their work and are willing to switch to AI-friendly companies. Globalization Partners (G-P) unveiled its second annual [AI at Work Report](#), revealing significant acceleration in AI adoption and use among global executives. Nearly all (91%) global executives are actively scaling up their AI initiatives and 74% report AI is critical to their company's success. Only 1% of executives reported not using AI at all. The AI at Work Report highlights the transformative impact of AI on modern work and business. The findings reveal executives are ready to push beyond basic AI solutions, harnessing the technology's potential for increased innovation, optimization and to drive success in a digital-first world. Despite the enthusiasm for AI, executives are cautious of its use for high-stakes decisions, especially in situations with legal or monetary ramifications. More than half (51%) of surveyed executives said they would not trust AI to make financial investment or budgeting decisions—suggesting a hesitance to hand over all mission-critical operations. [91% of Global Executives Are Scaling Up AI Efforts](#)



12. **Ultra-efficient LEDs: Perfect for High-Performance Indoor Lighting Applications** - High efficacy, deep dimming performance, reliability, robustness, and flexibility are crucial criteria for indoor lighting and applications. ams OSRAM is now presenting new mid-power LEDs that embody all these essential features. The OSCONIQ® S 3030 offers luminous efficacy ratings of up to 235 lm/W at 4000K (CRI 80) and advanced features such as deep-dimming capability and precise color control. The LED reduces maintenance cycles making it perfect for office panels, troffers, and continuous linear lighting. When integrated into high-bay and low-bay fixtures, it provides consistent illumination in warehouses and manufacturing spaces. With high color rendering options (CRI 80 and CRI 90) and a wide CCT range from 2700K to 6500K, the OSCONIQ® S 3030 also optimizes architectural accents and retail displays. Its superior hydrogen sulfide resistance and robust thermal cycling performance ensures long-term stability, even in harsh operating conditions. https://www.ledinside.com/news/2025/4/2025_04_24_03

Industry Resources

13. **DarkSky Approved Luminaires** - The DarkSky Approved Luminaires program provides objective, third-party approval for manufactured luminaires (light fixtures) that meet our strict guidelines for responsible outdoor lighting. Developed by industry professionals—including lighting engineers and designers—in collaboration with experts in the fields of wildlife biology, ecology, and human health, these guidelines ensure outdoor lighting minimizes light pollution while maintaining and improving functionality and safety. Luminaires that meet our rigorous criteria, based on the Five Principles of Responsible Outdoor Lighting, earn the DarkSky Approved seal—a trusted mark among the lighting community and consumers as the industry standard for dark sky-friendly lighting. [DarkSky Approved Luminaires | DarkSky International](#)



14. **Energy-Efficient Lighting Can Still Provide Opportunities for Energy Savings, DNV Study Finds** - The study was undertaken in partnership with 11 organizations across the U.S. and Canada. The study identified six separate “next generation” commercial lighting opportunities that are most likely to produce significant program savings or are gaining traction in the market. It graded these opportunities according to the potential size of the market, potential to deliver meaningful program savings, and ease of delivery. Three opportunities—higher efficacy LEDs, advanced lighting controls, and redesign LED-to-LED retrofit—are considered mass market opportunities and have the ability to fit into established energy management programs or have the ability to scale. The other three opportunities—demand management, germicidal UV, and tunable lighting—are niche market opportunities that apply to specific conditions and customers, and, while have the ability to provide energy savings, are not suited to broad adoption. [Energy-efficient lighting can still provide opportunities for energy savings, DNV study finds](#)

15. **NEMA Academy to Reshape Industry Education by Craig DiLouie** - For 25 years, the Lighting Controls Association, a council of the National Electrical Manufacturers Association (NEMA), has educated the building industry about lighting control technology and application, notably through its Education Express courses. The organization is proud to announce that starting May 1, 2025, the Education Express curriculum will be incorporated into a new learning management system, [NEMA Academy](#). The new platform will feature an improved website, a comprehensive learning platform, and access to a broad and growing curriculum covering lighting controls in addition to other topics, from lighting to safety to emergency preparedness. [NEMA Academy to Reshape Industry Education](#)



16. **NEMA Releases Grid Reliability Study** - The National Electrical Manufacturers Association (NEMA) has released its new study on grid reliability, [“A Reliable Grid for an Electric Future”](#), which focuses on challenges we face with electric demand, consumption and production over the next 25 years. The study highlights U.S. electricity demand outlook to 2050 and outlines technology and policy solutions to meet demand growth. Two key drivers behind the demand will be data centers and EV charging. To prioritize grid reliability and ensure our electrical infrastructure can adapt to surging demand and the integration of renewable energy, we can't build capacity fast enough. We need to invest in a suite of innovative near-term technologies to meet demand growth and prioritize policy and regulatory certainty to deliver a reliable and affordable energy system. www.makeitelectric.org
Study at: [pa-nema-grid-flexibility-study.pdf](#)

17. **The LHRC Announces Online Courses for 2025** - The Light and Health Research Center's (LHRC) is offering two online professional certificate courses in 2025. These interactive educational offerings will be led by LHRC faculty and staff who are the foremost experts in their fields. Courses begin in September, and registration for the classes is now open. The 2025 educational programs include:

- **Online Professional Certificate Course in Lighting Design - Sept. 11 to Nov. 13, 2025**

<https://icahn.mssm.edu/research/light-health/education/professional-certificate-lighting-design>

- **Online Certificate Course in Light and Human Health - Sept. 24 to Oct. 22, 2025**

<https://icahn.mssm.edu/research/light-health/education/online-certificate-light-and-human-health>

18. **Architecture + Design Master Continuing Education** - Architecture + Design Master gives architects and design practitioners the opportunity to earn free continuing education units (CEUs) through online articles and webinars, making it easy for them to maintain their licenses. To receive one hour of continuing education credit as approved by IDCEC or one learning unit approved by AIA, simply click on an article or webinar to view it and take the associated multiple choice exam — it's that easy! [Architecture & Design Master Continuing Education](#)



- Convenient Online Learning
- Designed for Professionals
- Learn Anytime, Anywhere
- Earn Credits for Free

Articles of Interest:

19. **Data Centers: More Power to Them** by Jim Lucy - 2025's surge in data center construction will be fueled by the greater demands of AI (artificial intelligence) for electrical power. The explosive growth in data center construction and the related increases in demand for the electrical system installation and supply and logistical services they require is quite unlike anything the electrical business has ever seen. Over the years there's been booms in speculative office construction, energy-efficient lighting retrofits and the installation of power quality industrial automation products. But the dollars being spent on new data centers – and the electrical construction materials that help power them – may very well be unmatched. This all means big business for electrical contractors, design engineers and other electrical professionals involved with data center construction. [Data Centers: More Power to Them | Electrical Wholesaling](#)

20. **Say Hello to Your New Colleague, the AI Agent** By Marc Benioff - I've been part of many waves of technology in my 25 years at Salesforce—from cloud computing to mobile, social and the early stages of AI. But nothing compares to the transformation we're seeing now. While much of the AI conversation is about large language models, the real revolution is happening in AI-driven digital labor: autonomous, intelligent agents. Because such agents act on their own, collaborate and continuously learn and improve, companies of any size can scale beyond human limits. Today's CEOs are the final generation of executives leading exclusively human workforces. Going forward, we'll need to learn how to manage human workers and digital labor to work together to deliver efficiency and productivity. Integrating AI agents into daily operations will become a leadership skill that separates companies that thrive from those that fall behind. Mr. Benioff is Chair and CEO of Salesforce. [iq4POgFJlwS2n9NdKvjD-WSJNewsPaper-4-4-2025.pdf](#)

21. **Cultivating Healthier Spaces Through Lighting Design** by Grant Kightlinger & Lauri Tredinnick - How designers are using breakthroughs in biologically effective lighting to mimic natural light cycles and improve human health at home and at work. Circadian lighting — and biologically effective lighting more broadly — is an exciting frontier in the design industry with immense potential to improve occupants' quality of life. These strategies focus on creating lighting conditions that harmonize with our biological clock, improve alertness, and support hormonal balance. The ongoing exploration of light's effects on health is paving the way for significant advancements in biologically effective lighting design. Innovations such as simplified controls, adjustable spectrum luminaires, and artificial daylight solutions can help create environments that not only meet aesthetic and functional needs but also enhance well-being. As we continue to refine our approaches, the potential for cost-effective circadian lighting solutions that align with our biological rhythms becomes increasingly feasible, ultimately fostering healthier living and working environments. Breakthroughs in Biologically [Effective Lighting Design | EC&M](#)

22. **Eye on the Storm** by Tim Kridel - The new ANSI/NEMA C137.10 standard is designed to keep streetlights on during extreme weather. But in normal times, it also creates opportunities in the smart cities market. By the end of this decade, the North American smart city market will be worth close to \$1 trillion, a roughly fourfold jump from 2024, [Grand View Research](#) predicts. A new standard from NEMA's Lighting Systems Division should help electrical contractors and electrical design firms grab a share of that burgeoning market by leveraging upgrades aimed at bolstering outdoor lighting resiliency. [ANSI/NEMA C137.10-2024](#) creates a vendor-agnostic format for data produced by sensors installed on light poles along roadways and pedways. That standardization enables municipalities, utilities, and other lighting infrastructure owners to have a mix of hardware and software vendors without risking data incompatibility. [ANSI/NEMA C137.10 Standard and Lighting System Interoperability | EC&M](#)

23. Improving Building Operations with Cloud-Based Applications by Rahul Chillar - In today's rapidly evolving digital landscape, the integration of internet of things (IoT), artificial intelligence (AI), and further smart building technologies is transforming the operational management of real estate. With an increasing need for data-driven decision making, the implementation of building operation systems gains momentum. Since 75% of commercial buildings are not managed as efficiently as they could be, there is huge potential to build on. Cloud-based building operation applications can be viewed as indispensable for future-proof facilities management. As the number of connected devices is expected to exceed 75 billion by 2025, data collection in commercial buildings is becoming more relevant than ever. [Improving Operations: Cloud-Based Building Operation Systems](#)

Monthly Feature:

UAE Commits \$1.4 Trillion to U.S. Investments Following Trump Meeting - The White House announced that the United Arab Emirates (UAE) has committed to investing \$1.4 trillion in the United States over the next 10 years. The massive agreement, unveiled Friday, is being described as a historic investment framework that will reshape economic and technological cooperation between the two countries.

The commitment was finalized after a meeting between President Donald Trump and Sheikh Tahnoun bin Zayed al Nahyan, the UAE's national security adviser. The two leaders, along with top Emirati business executives and sovereign wealth fund heads, met earlier this week in the Oval Office and at a dinner with Vice President JD Vance and Cabinet members.

Key Investment Areas

According to the White House, the new framework will dramatically increase the UAE's investments in four major areas: artificial intelligence infrastructure, semiconductors, energy, and U.S. manufacturing. These sectors are considered critical for America's future competitiveness and technological leadership.

Among the specific commitments:

- A \$100 billion investment package focused on next-generation data centers and energy infrastructure designed to support U.S. leadership in artificial intelligence.
- A \$25 billion joint initiative between the UAE's ADQ investment fund and U.S.-based Energy Capital Partners to develop energy infrastructure and data centers.
- Large-scale investments by UAE energy company XRG, part of Abu Dhabi's state-run ADNOC, to boost U.S. gas production, chemical manufacturing, and low-carbon energy solutions.
- A \$1.2 billion mining partnership to secure critical minerals needed for modern electronics and renewable energy technologies.
- Funding for the construction of a new aluminum smelter, the first in the U.S. in 35 years, led by Emirates Global Aluminum, which will nearly double domestic aluminum output.

The investments are part of a broader effort to deepen economic ties between the U.S. and the UAE while helping both countries compete in an increasingly high-tech global economy.

Trump's Role in Securing the Deal

President Trump played a central role in bringing the deal to life. After hosting Sheikh Tahnoun and other UAE officials at the White House, Trump wrote on Truth Social that the meeting showed the strong friendship between the two nations and highlighted discussions on expanding economic and technological cooperation.

"UAE and the U.S. have long been partners in the work to bring peace and security to the Middle East and the world," Trump wrote. "Discussions also included ways for our countries to increase our partnership for the advancing of our economic and technological futures."

According to a statement from the UAE Embassy in Washington, Sheikh Tahnoun praised Trump's leadership and economic policies, saying they played a major role in encouraging foreign investment and strengthening partnerships like this one.

A Signal of Strategic Cooperation

This deal comes as global competition heats up in the AI and energy sectors. With U.S. companies like Microsoft, Google, Amazon, and Meta pouring billions into AI infrastructure, international partners are looking to align with American innovation.

The White House emphasized that the investment underscores not only economic cooperation but also the close diplomatic relationship between President Trump and UAE President Mohammed bin Zayed al Nahyan.

The UAE's commitment represents one of the largest long-term foreign investments in U.S. history. Over the next decade, this partnership could help power everything from clean energy and chip production to the next generation of artificial intelligence breakthroughs.

[UAE Commits \\$1.4 Trillion to U.S. Investments Following Trump Meeting – Finance and Money](#)