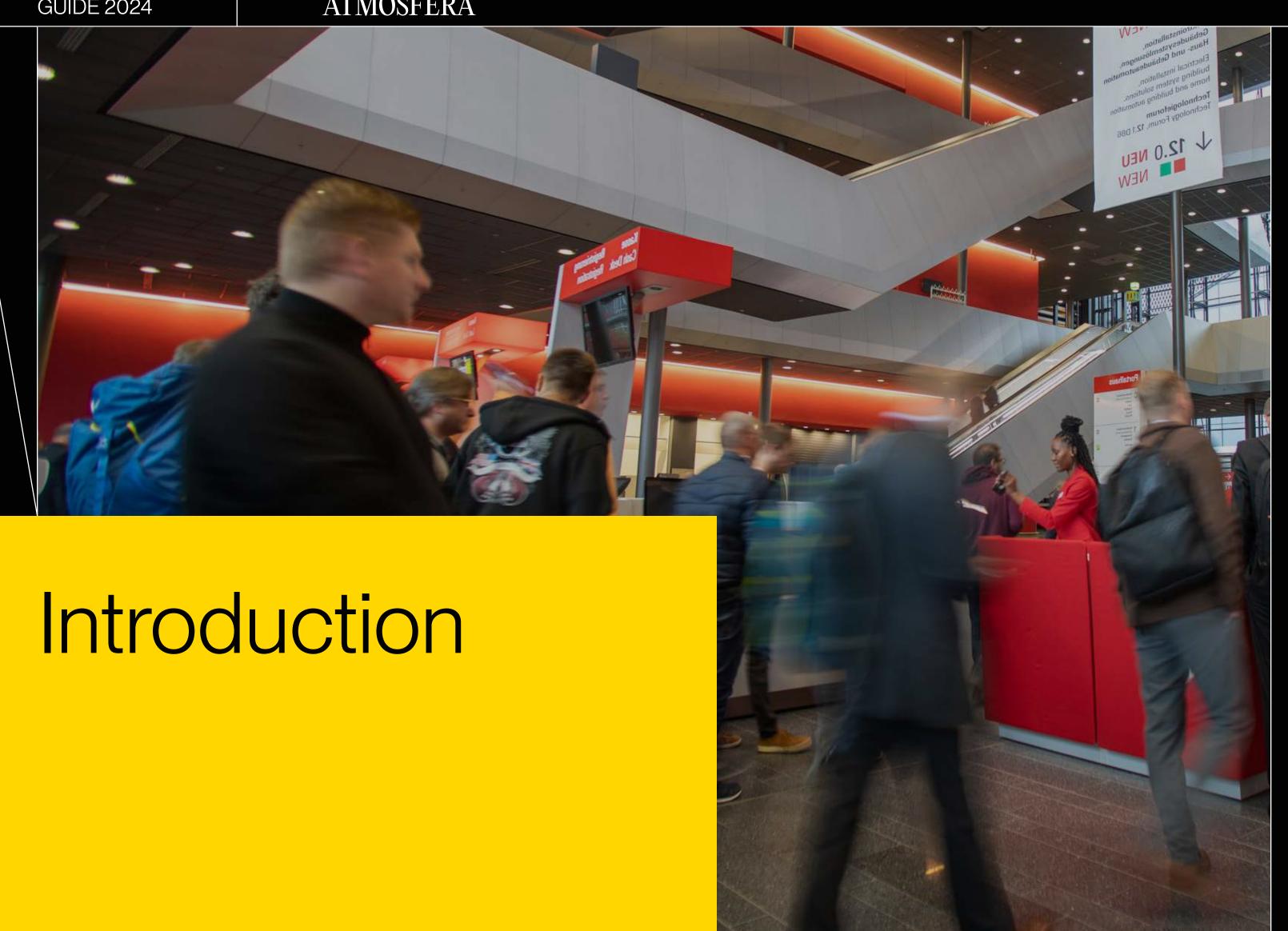
# Beyond Light + Building 2024 A Guide to Emerging Design Philosophies

BRIDGING THEMES WITH THE WIDER WORLD OF DESIGN AND TECHNOLOGY

### **ATMOSFERA**



This guide was designed with two primary objectives at its core. Firstly, it intends to delve into and further explore the themes that emerged during **Light + Building 2024**.

Held in Frankfurt, Light + Building is the premier international event for the **lighting**, **electrical** engineering, home and building automation, and connected security technology sectors, attracting key professional groups such as architects, designers, planners, engineers, and tradespeople. Our team provided daily updates and insights through our social channels and magazine, closely tracking the event's developments.

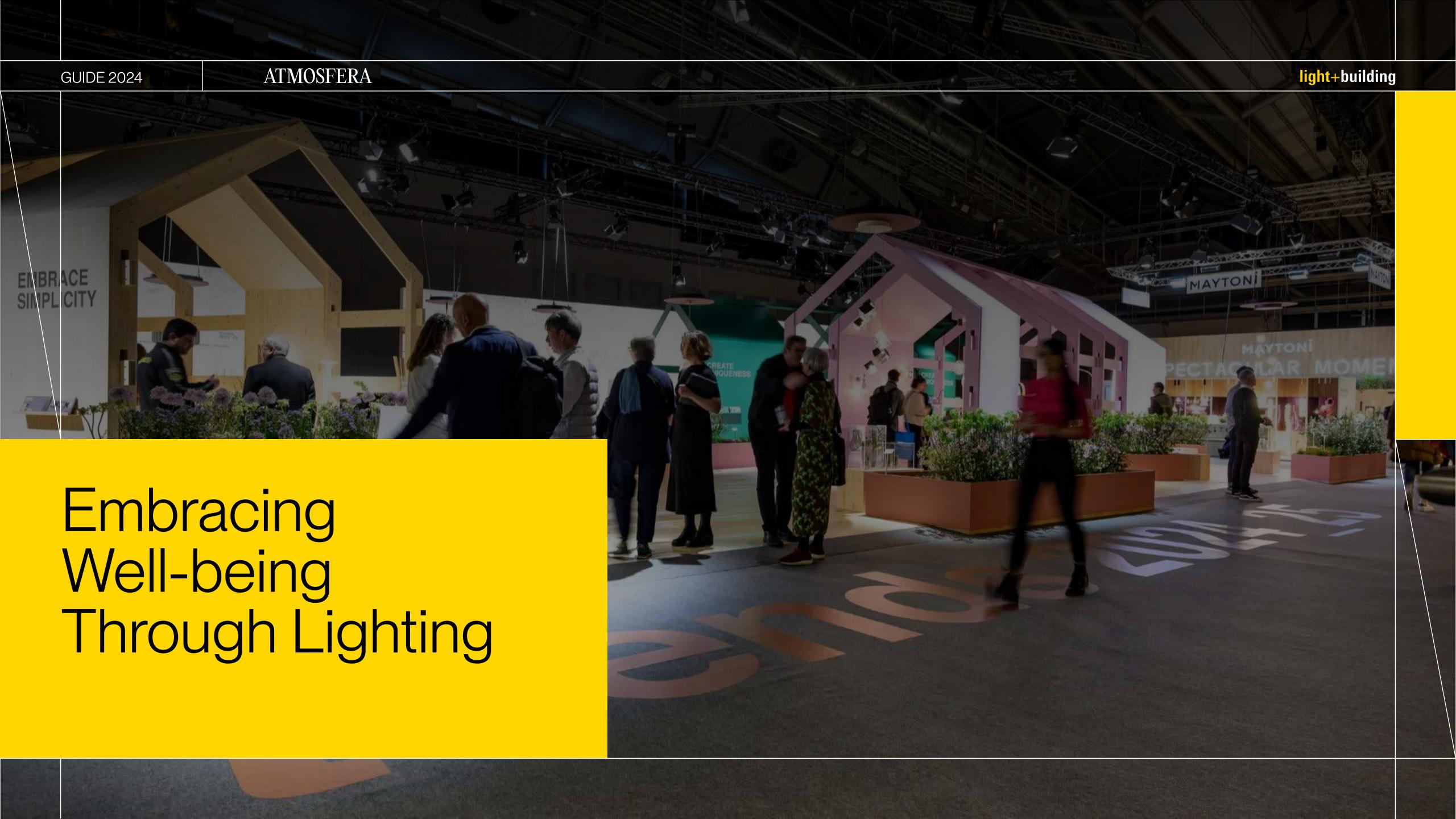
Secondly, this guide sets out to examine how the fair's highlighted themes — ranging from wellbeing in lighting solutions and advancements in technologies to material innovation and the movement towards miniaturization and invisible **lighting** — intersect with and inspire broader design trends and innovative projects beyond the confines of the fair.

We aim to provide a comprehensive overview that highlights the innovations and discussions from Light + Building 2024 but also connects these ideas with broader design and technology trends, offering insights into the evolving landscape of light and building industries.



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When discussing **colour temperature**, there's an increasing presence of **outdoor products and urban lighting systems** designed to ensure human well-being, but above all, the environment and other species' well-being. While **cold light** aids our concentration at night, it can also disrupt the life cycles of animals and plants, causing them harm. This development has spurred a range of innovative solutions equipped with **automatic programming or sensor technology** capable of adapting to various environmental stimuli.

These include the movements of animals, the flow of vehicle traffic, the shift from day to night, and the implementation of a "virtual midnight" — a feature that enables a scheduled dimming of lights. Such advancements not only lead to significant **energy savings** but also support the "**Dark Sky Friendly**" lighting initiative, which minimises night-time light pollution. **Cariboni Group** is one brand committed to this change, not only with its trade fair new products like **Spoon** but also by pledging to update all its collections.

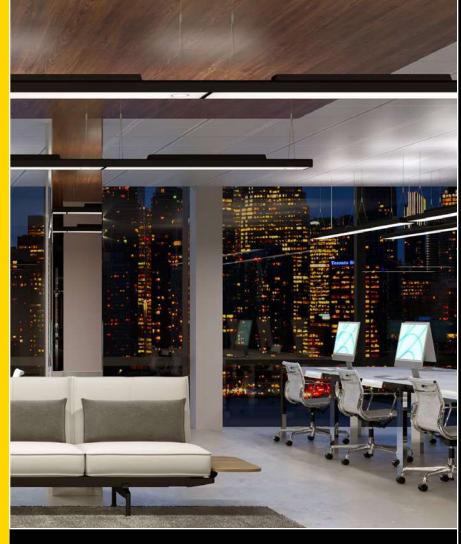
Another example comes from **BEGA**, which introduced **BugSaver®**, eco-friendly lighting designed to protect nocturnal wildlife. This technology, ideal for urban and natural settings, significantly reduces the blue light component – less attractive to insects – in amber light.



Spoon by Carboni Group, 2024

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### EMBRACING WELL-BEING THROUGH LIGHTING



3F HAL by Alessandro Scandurra for 3F Filippi, 2024

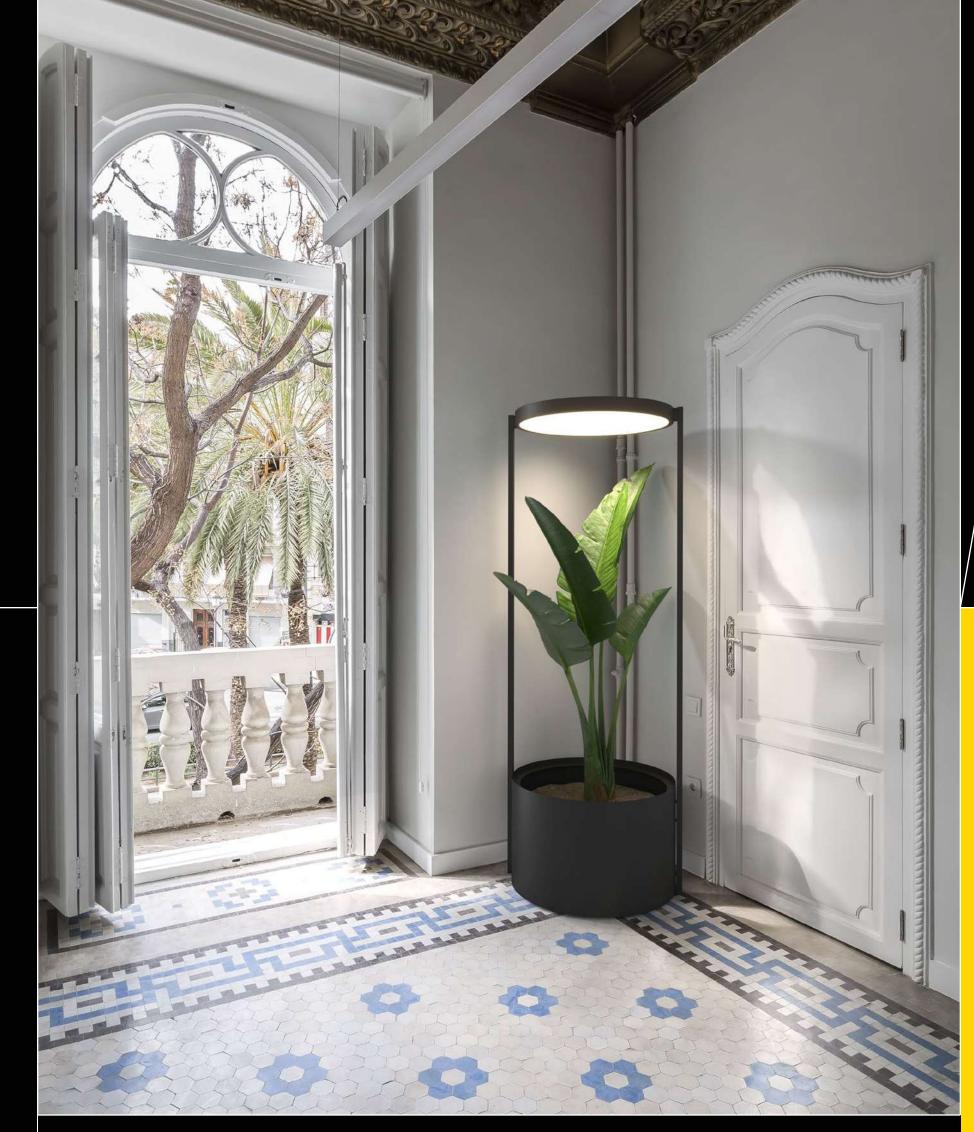
Similarly to outdoor environments, well-being is paramount indoors, encompassing offices, homes, and communal spaces. Products designed for versatility ensure appropriate and consistent lighting across a multitude of settings, maintaining both adaptability and uniformity in illumination.

An example is **3F Hal**, the new product from the **3FA line**, designed by **3F Filippi** in collaboration with architect **Alessandro Scandurra**. The collection incorporates three differet emissions (direct, indirect, and spotlight) that can be controlled individually and independently.

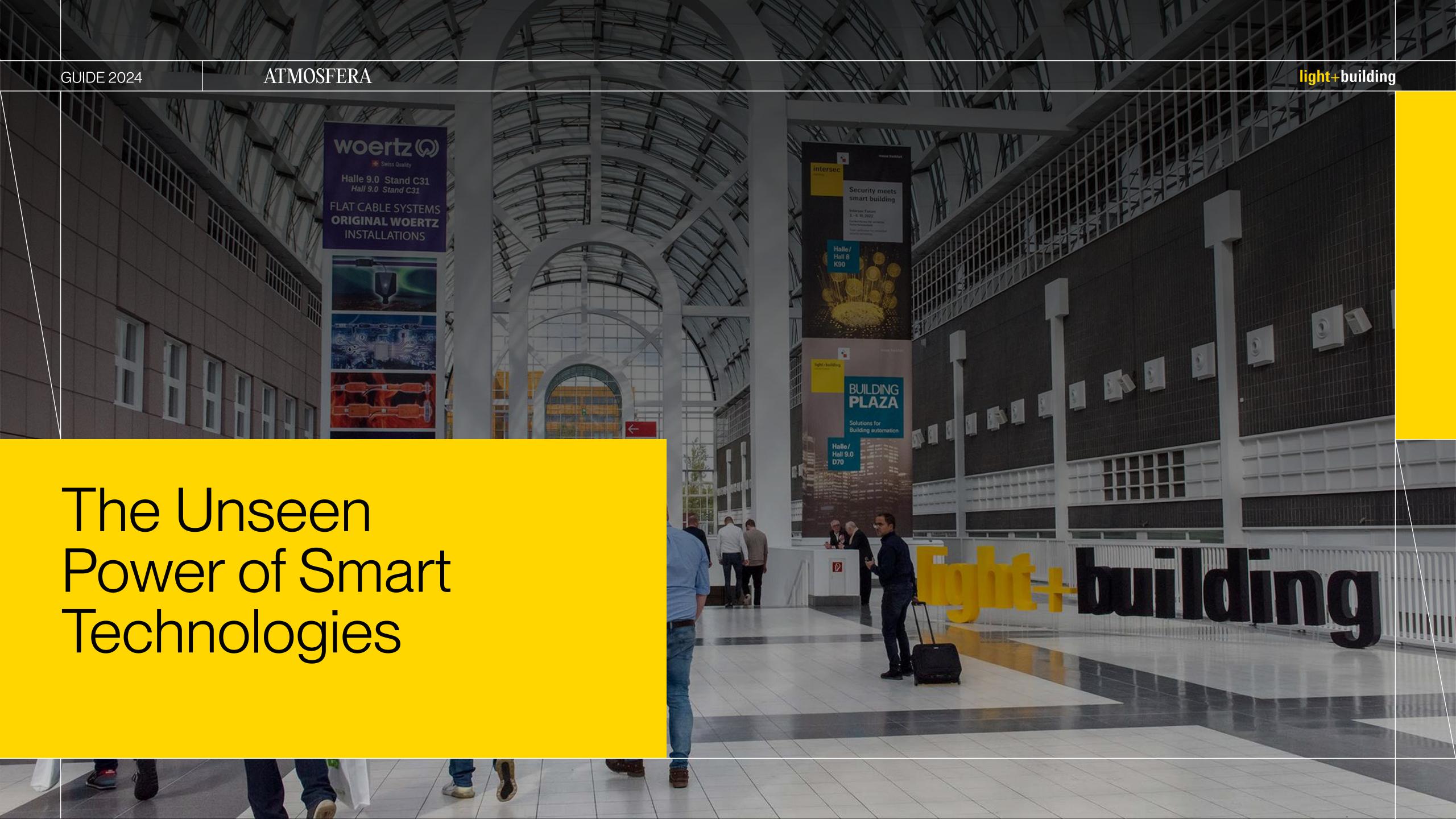
"Multi-species" solutions are also emerging indoors, such as LIFE, the new lamp concept from PROLICHT designed by Giampiero Peia (PEIA Associati) in collaboration with Robonica.

The increasingly common presence of plants indoors and the need to provide the right amount of light have led to the development of a multifunctional product with various configurations, specific light spectra, and types. LIFE uses "tunable white" LED modules, allowing for an optimal light flow for plant growth while being pleasant for human perception.

These solutions wouldn't be possible without technology.



LIFE by Giampiero Peia for PROLICHT, 2024



### THE UNSEEN POWER OF SMART TECHNOLOGIES



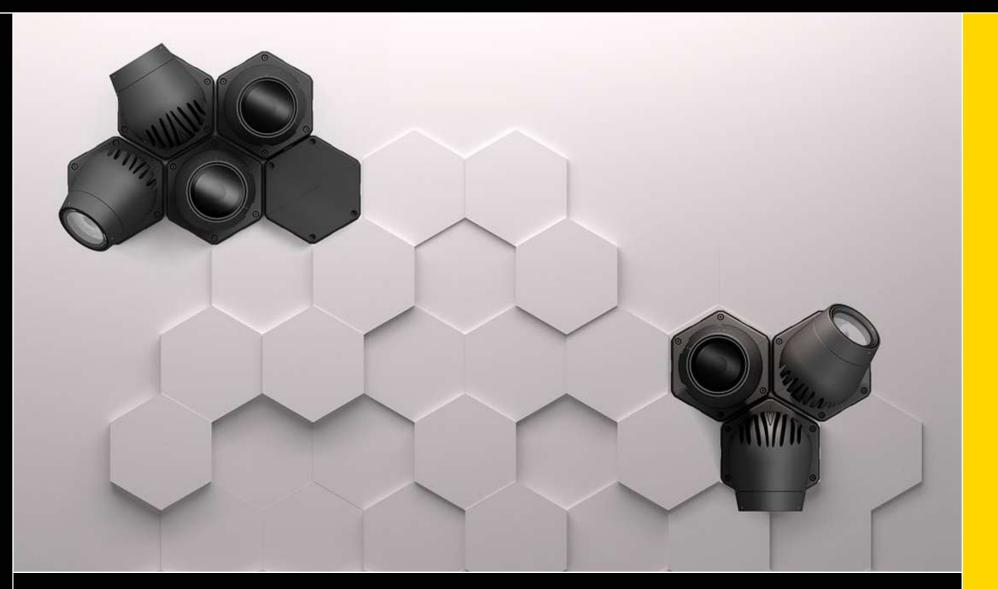
When innovation is rooted in the product, the spotlight falls on the unseen realm of technology. Tomorrow's lamps and lighting systems transcend mere illumination to become intelligent solutions. Leveraging new applications, integrated data collection frameworks, and the **Internet of Things (IoT)**, these products evolve into programmable, multifunctional devices, reshaping our interaction with light.

Take, for example, **Targetti's Vader projectors**: using a single device (**Control Pod**), you can control up to 64 fixtures, adjust brightness, and manage colour temperature. Designed as modular elements, they can be interconnected, allowing the number of fixtures to adapt to the project's needs.



Polesano by Dean Skira e Delta Light, 2024

Polesano by Dean Skira e Delta Light, 2024

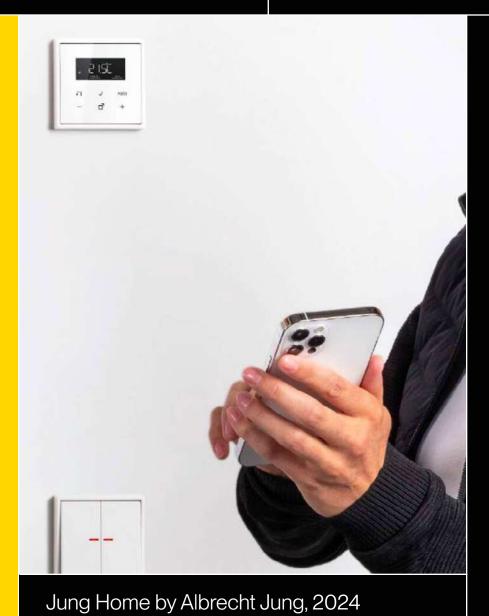


Projectors Vader by Targetti, 2024

Polesano, a product design collaboration between Dean Skira and Delta Light, introduces a new concept of lighting tools specifically for urban environments. Polesano uses CTRL DELTA, a user-friendly solution for easy wireless control via mobile devices, which offers the option to install an integrated camera and Wi-Fi connection to create communication networks when installing multiple fixtures.

### **GUIDE 2024**

### THE UNSEEN POWER OF SMART TECHNOLOGIES



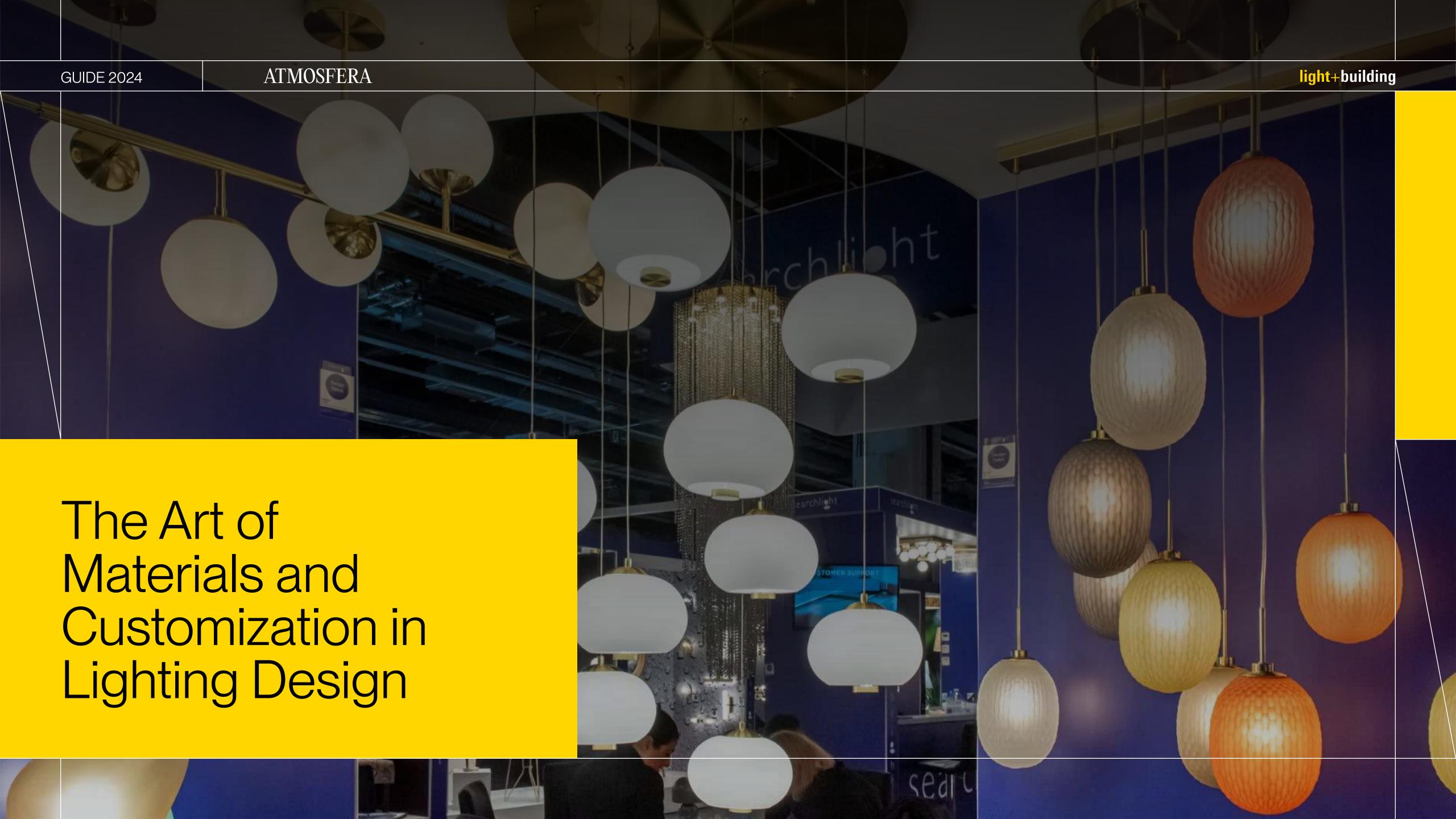
Jung Home, the new solution offered by the Albrecht Jung brand, operates independently of the internet by using its Bluetooth network to connect various components without wiring. The underlying idea is to facilitate the installation of control systems in both new and old buildings, leveraging the home's electrical network. "Jung Home" offers streamlined control through an app that centralizes all functionalities and status indicators, ensuring user-friendly operation, enhanced security, and a design that adapts seamlessly to any environment.

**Lune d'Acqua** is a design by **Benedetta Tagliabue** and **Ersilia Vaudo** for **Artemide**, where the technological aspect is not only visible but also integral to the product itself: this pendant or table lamp adopts the patented optical principle of **Discovery**. The original design, a product of the brand's innovative research, utilizes a LED strip that projects light onto a flat, transparent PMMA surface featuring meticulously distributed micro-engravings to achieve maximum efficiency and uniformity.

It offers precise and focused lighting, ensuring supreme comfort in any setting. With its curved reflective surface, **Lune d'Acqua** reimagines this technology to craft a captivating product that leverages internal geometry for a unique effect.



Lune D'Acqua by Benedetta Tagliabue ed Ersilia Vaudo for Artemide, 2024



**Material experimentation** stands out as a central theme at the fair, showcasing everything from casings and diffusers crafted from **natural materials** that are raw, untreated, and unprocessed to innovative new materials derived from **biological sources** and **recycled waste**.

A notable case study is **IQ LUX**, which has developed **3D printing filaments** from natural or recycled sources. In this instance, waste materials are incorporated into the filament, thus becoming a valuable resource. Specifically, the brand uses regenerated **PET** or **biobased plastic (PLA)** derived from corn starch or sugarcane combined with wood, concrete, or vegetable fibres.

The innovative **Dune fixture**, designed by **Werner Aisslinger** for the German brand **Baulmann Leuchten**, also harnesses the power of **3D printing technology**.

The solution features a **quartz sand surface structure** using a new printing process (in collaboration with **Sandhelden**) and gives the product a tactile character. Crafted from modular spheres this adaptable series seamlessly transitions between a pendant, floor lamp, table lamp, or wall fixture. It embodies a versatile fusion of lighting fixtures designed to deliver custom illumination tailored to fit any setting.





Wever & Ducré, in collaboration with the renowned street artist Zoie Lam and as part of the XAL group alongside IQ LUX, unveils an exclusive artist edition of the CLEA pendant lamp. For this unique project, Lam hand-painted 25 models, each becoming a one-of-a-kind piece in this limited collection.



CLEA by Zoie Lam for Wever & Ducré, 2024



MUSE Stilla by Diomede Light, 2024

Many of today's systems are modular and customizable to ensure optimal performance in all environments. It's the case with **Diomede Light** and the **MUSE family**: consisting of 3 primary sources, **Capsule**, **Stilla**, and **Spot**, the combination of these with various accessories offers multiple lighting solutions that can adapt to both style (modern design, decorative, and technical installations) and customer requirements.

MUSE Capsule by Diomede Light, 2024



### THE REVOLUTION OF MINIATURIZATION AND INVISIBLE LIGHTING



A highlighted theme at the fair is **miniaturization**, which focuses on shrinking devices and fixtures to their smallest possible sizes. **iGuzzini**, for instance, unveiled **Filorail**, the new ultra-thin electrified track — the smallest on the market — with an opening of just **3.6 millimetres**.

The aim is to integrate technology into spaces using architectural principles, ensuring it enhances the environment discreetly and unobtrusively. Technology becomes apparent solely through its practical applications and enhancements to the space.



Filorail by iGuzzini, 2024 Filorail by iGuzzini, 2024



°plug by Frits Jeuris for Eden Design, 2024

For **Eden Design**, **Frits Jeuris** was inspired by the simplicity and functionality of jack connectors: **plug** is a modular system consisting of a thin tube that emits light from one end. All components are **150mm** (or a multiple thereof) in length, and thanks to the tubular modules designed as lines, curves, and nodes, along with plug-in technology, the system allows for endless configurations adaptable to any setting.

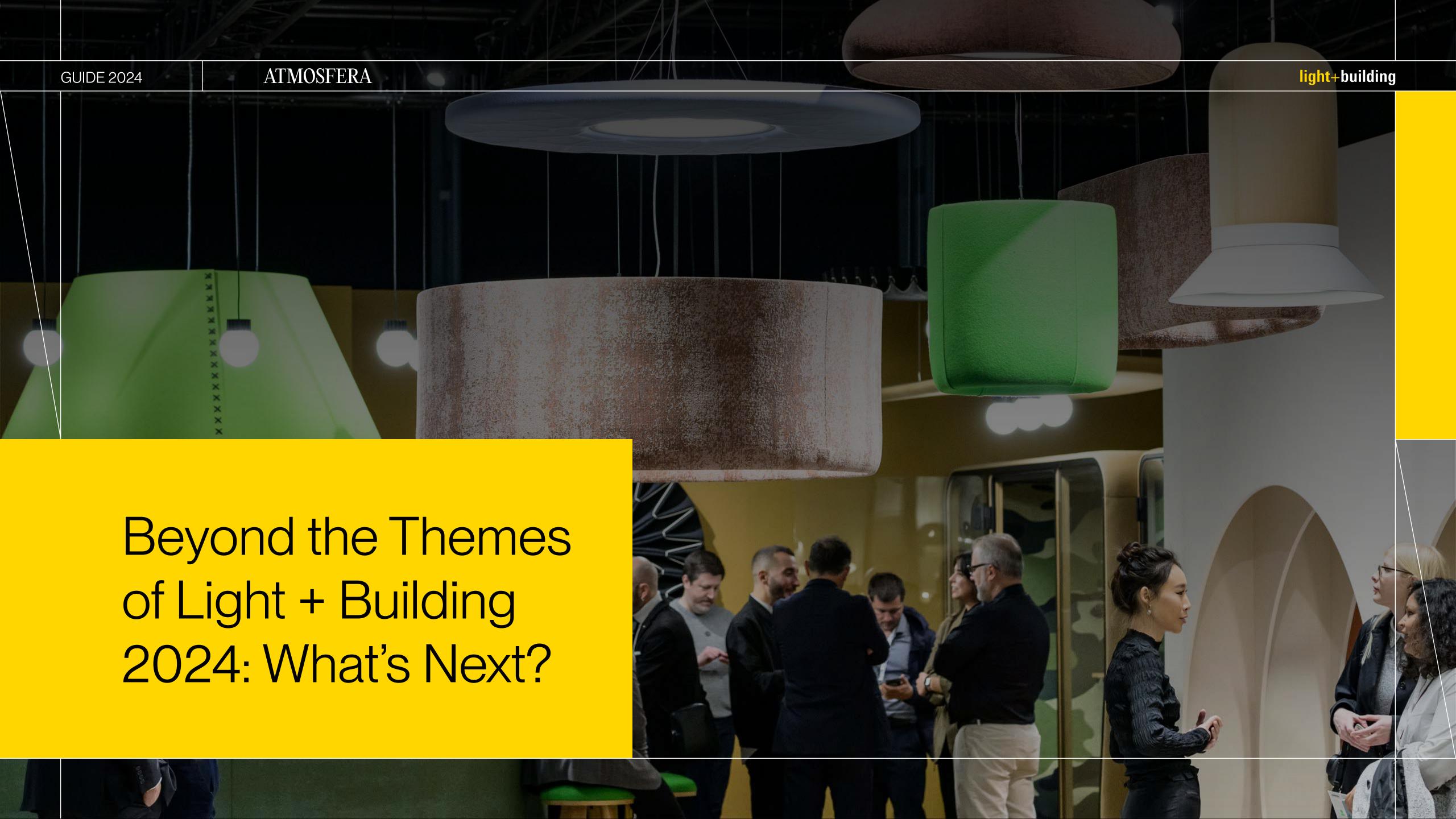
### THE REVOLUTION OF MINIATURIZATION AND INVISIBLE LIGHTING



In addition to product miniaturization, there's a drive to conceal the light source to ensure maximum comfort. The Swiss brand **Schätti** introduced the **GLARONA fixture family** designed by **Jörg Boner**: aesthetically minimalist, the series hides the light source and, through the use of materials and a flat edge angle, absorbs a high amount of light, creating an attractive interplay of light and dark circular shapes. With its sculptural and clean forms, Glarona is not just a functional fixture but becomes a decorative light object and a piece of furniture.



GLARONA by Jörg Boner for Schätti, 2024



The discussions and innovations showcased at **Light + Building 2024** go beyond a singular event, mirroring the **collective evolution within the design and technology sectors**.

The narrative then explores how these concepts are actualized in today's projects, stepping outside the trade fair's parameters to highlight their significant **influence** in steering the industry towards sustainability, user-centricity, and technological advancement, thereby reshaping the wider sphere of design and building technologies.

Based on this concept, insights will be shared by leading experts including Johann Gielen, founder of Johann Gielen Lighting Design; Michael F. Rohde, professor of architecture and lighting design; Carla Wilkins and Elisa Rocchi from Lichtvision; Lance M. Hollman and Sophia K. Klees, partners at Jack Be Nimble; Ulrike Brandi of Ulrike Brandi Light; and Gabriele Allendorf, founder of Light Identity. We interviewed these distinguished professionals, who offered their perspectives on the key themes emerging from the fair.



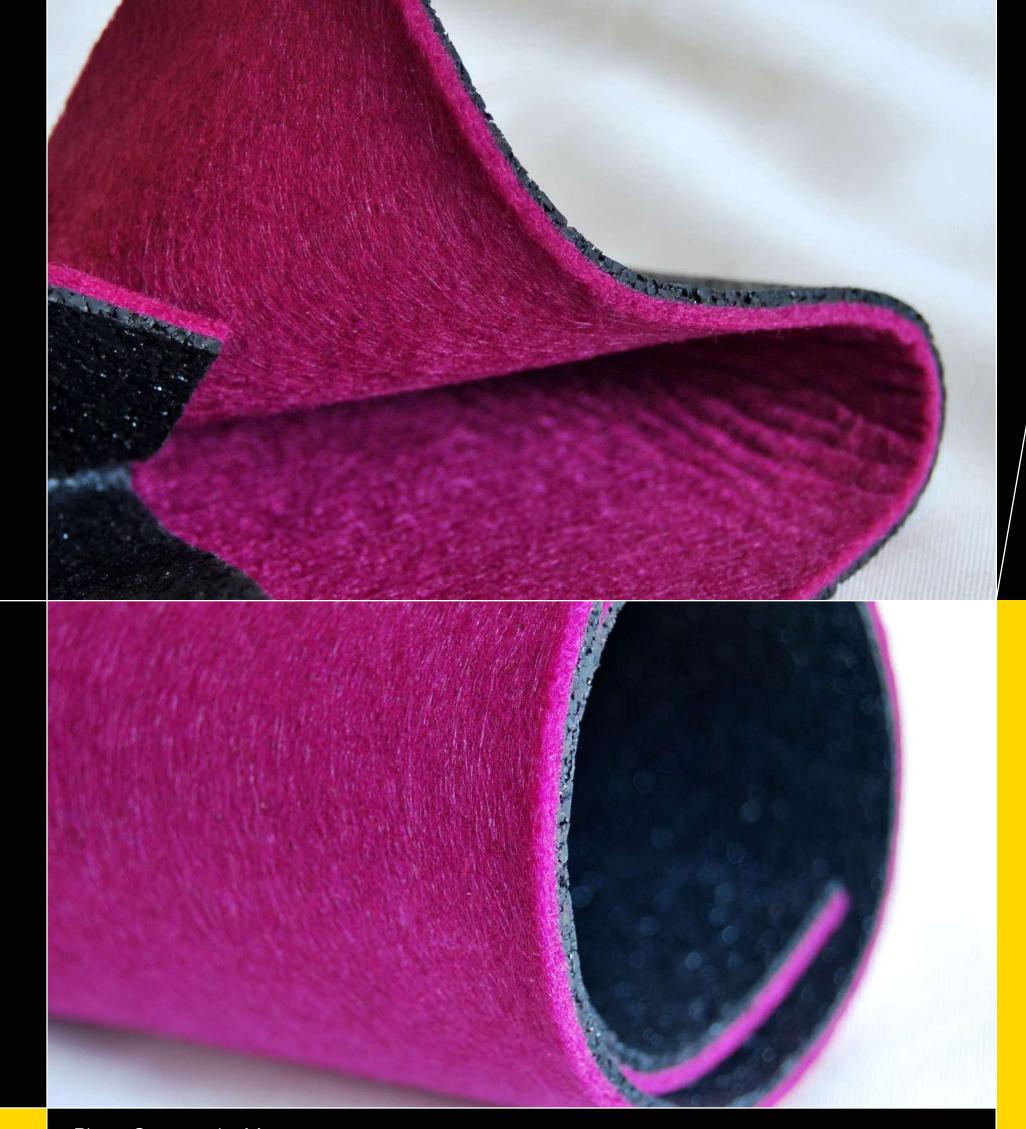
The narrative spotlights initiatives by entities like **Matrec**, noted for its focus on sustainability and the circular economy, alongside the inventive projects from studios such as **RDesign International Lighting** and **FerryGunawanDesigns**.

These examples demonstrate the embodiment of the central themes of the fair — like ecofriendliness, technological integration, and material innovation — in crafting environments that prioritize well-being and tackle ecological challenges.

Additionally, the transformation of **Piacenza's Sala dei Teatini** into a contemporary auditorium highlights the fair's influence on enhancing cultural spaces. This project, under the guidance of **I-DEA SrI**, demonstrates a refined use of **LED lighting** to accentuate architectural details while meeting modern performance needs, epitomizing the fair's ethos of blending aesthetic appeal with technological innovation and energy efficiency.

### Matrec's Committment: Sustainability at its Core

Matrec, a consultancy and research firm, specializes in sustainability and the circularity of materials. With a focus on developing metrics and KPIs to assess the impact of the circular economy, Matrec is a leading advocate for sustainable practices within the industry. Since its inception in 2002, Matrec Lab has functioned as an international research centre, diligently compiling a vast collection of circular materials and products. Founded by architect Marco Capellini, Matrec has been instrumental in promoting sustainable materials within the design community, notably at events such as the Salone and Milan Design Week. Its material database has become an indispensable tool for designers and companies striving to integrate sustainability with innovation to remain competitive.



We discussed this issue with Johann Gielen. Click here to explore the interview.

Photo Courtesy by Matrec

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### BEYOND THE THEMES OF LIGHT + BUILDINGS 2024: WHAT'S NEXT?



Photo Courtesy by Matrec

At the core of **Matrec's philosophy** is the belief that sustainability is crucial in both personal and professional spheres. The company emphasizes the necessity of designing products for their entire lifecycle, ensuring that items are both repairable and recyclable.

This holistic approach influences material selection and product design, promoting a shift towards circular processes. Matrec's commitment to **raising awareness about sustainable practices** among governments, associations, and the industry has played a significant role in the increasing adoption of these practices.



Photo Courtesy by Matrec



Photo Courtesy by Matrec

The company advocates for a cultural shift towards sustainability within corporations, viewing it as an ethical obligation and a strategic imperative. It emphasizes the vital role that designers and production departments play in establishing a culture of sustainability. Matrec's **dedication to sustainability shines through its emphasis on transparency, high-quality, repairable products with lasting appeal**, all crucial elements in pushing forward the sustainability agenda. Their efforts have facilitated a more seamless transition towards circularity, with support from bodies such as the **European Commission**, demonstrating that sustainability can be a reliable and integral aspect of consumer practices.

## The perfect balance in interior spaces: SOUL ART by RDesign International Lighting



Photo Credits Jin Weigi & Ban Ye

**SOUL ART**, an exhibition space designed by **RDesign International Lighting**, showcases a unique blend of architectural form and lighting to enhance the viewing experience. In the entrance and front hall, interior decoration grooves emphasize the space's distinct features, conveying its pure essence. The main exhibition hall, a vast area bathed in natural light, retains an arc-shaped roof with **Bauhaus elements**.

The design cleverly conceals **HVAC** and firefighting equipment, maintaining the space's aesthetic integrity.

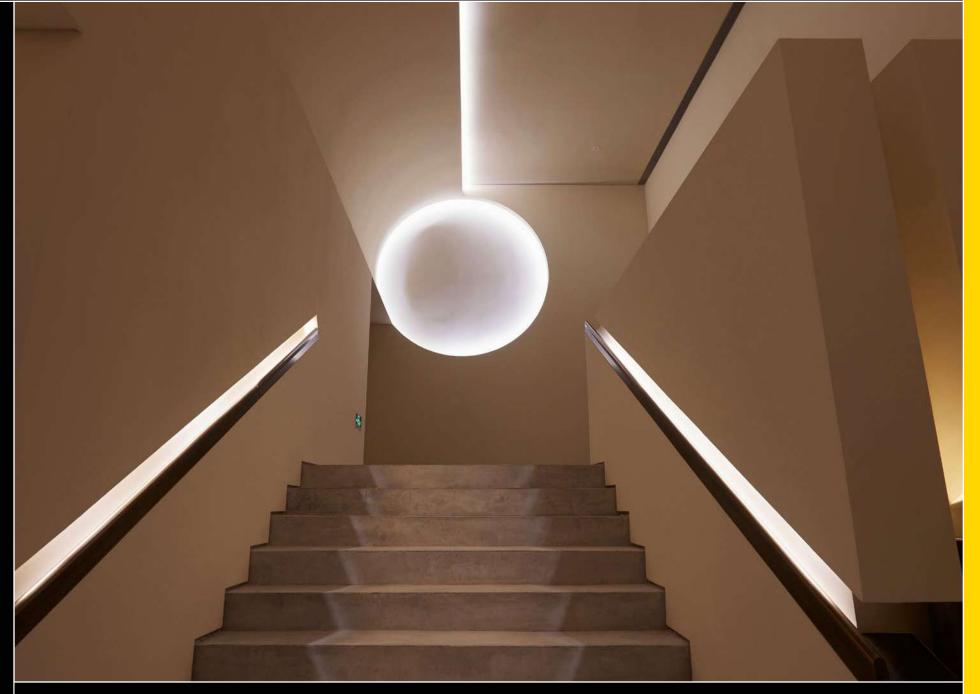


Photo Credits Jin Weigi & Ban Ye

### BEYOND THE THEMES OF LIGHT + BUILDINGS 2024: WHAT'S NEXT?



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The lighting scheme extends the architectural vision by embedding high-power linear lights above a reverse arc, creating a soft, uniform light across the space through the arc ceiling's reflection. This setup ensures optimal lighting for modern and contemporary art exhibitions, with natural daylight entering through north-facing skylights and artificial light adjusting accordingly.

At night, indirect lighting mimics soft sunlight, offering a pleasant atmosphere for exhibitions and events. All lighting tracks are discreetly located to preserve the space's original purity while accommodating diverse art displays.

We discussed this issue with Lichtvision. Click here to explore the interview.



Photo Credits Jin Weiqi & Ban Ye



Photo Credits Jin Weiqi & Ban Ye

Photo Credits Jin Weiqi & Ban Ye

### Discrete Exterior Architectural Lighting in FerryGunawanDesigns' Jakarta Project

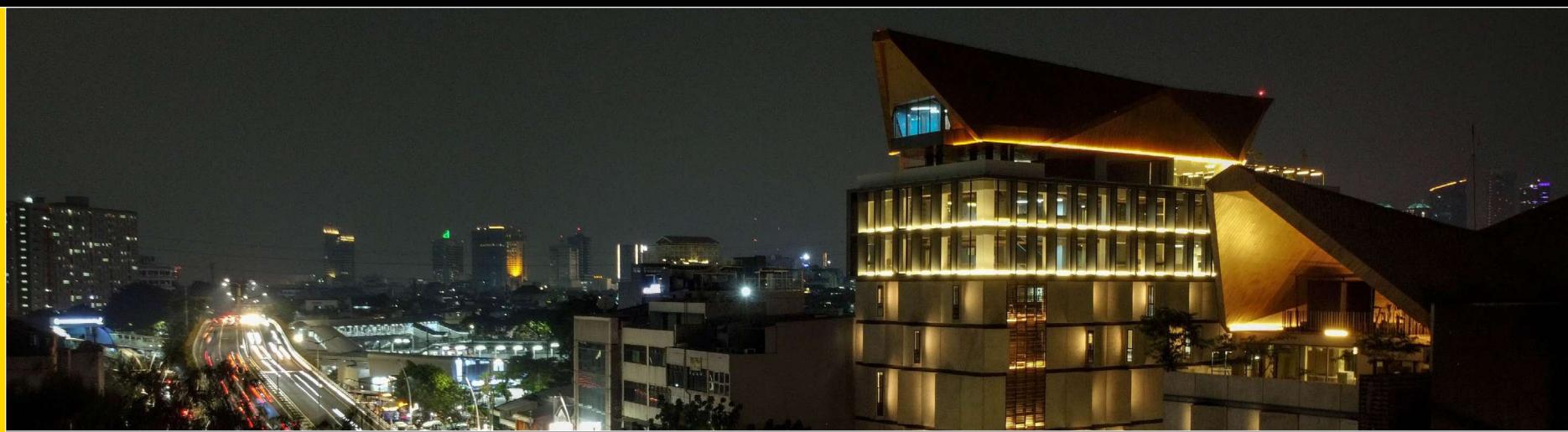


Photo Credits Ferry Gunawan, Yesser Priono, Suharyadi



Photo Credits Ferry Gunawan, Yesser Priono, Suharyadi

"Bursting from Within" by FerryGunawanDesigns is an innovative lighting project for two office buildings in central Jakarta, Indonesia, next to a bustling station. The project, led by Ferry Gunawan with collaboration from Atelier Cosmas Gozali for client PT. Santos Jaya Abadi has been completed in April 2023. The first building, completed in 2018, features a six-story structure with a roof inspired by local Indonesian tribal architecture, while the second, an eight-story building completed in 2023, boasts an inverted boat-shaped roof.



Photo Credits Ferry Gunawan, Yesser Priono, Suharyadi



Photo Credits Ferry Gunawan, Yesser Priono, Suharyadi

A discreet illumination beautifies the buildings without causing facade clutter or office glare.

Discrete lighting strips were added to randomly located windows on each floor, creating a

dynamic lighting effect on the facade

that accentuates the buildings' architectural

features. This concept has been applied to both buildings, with additional lighting strategies balancing the facades, main canopy, atriums, and distinct rooftop designs. The design achieves a floating effect for the boat-shaped roof of the second building against the night sky.

The lighting design prioritizes sustainability, utilizing high-powered linear **LED strips** with minimal power consumption, cleverly hidden to integrate with the office interiors. The project showcases a commitment to enhancing urban lighting texture in Jakarta while minimizing light pollution and power usage. **FerryGunawanDesigns**, known for its multidisciplinary approach in architecture, interior, lighting, and product design, has successfully highlighted the inherent beauty of these buildings through thoughtful lighting, adding a new layer to Jakarta's urban landscape.

We discussed this issue with Jack Be Nimble. Click here to explore the interview.

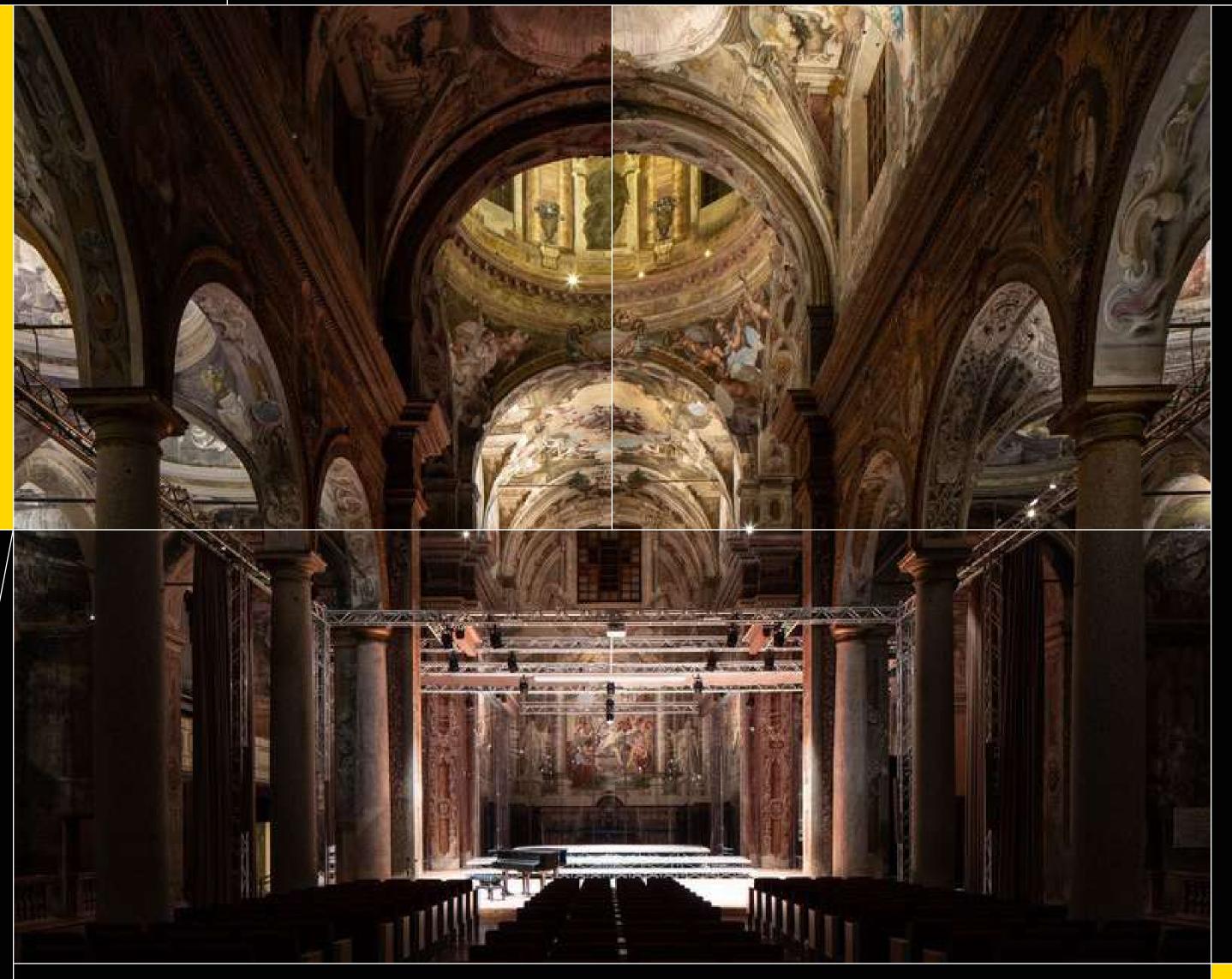
### LED Lighting Enhances Art: I-DEA Studio's Illumination Project at Sala dei Teatini, Piacenza

The **Sala dei Teatini in Piacenza**, **Italy**, transformed from the **Church of San Vincenzo**, now serves as a contemporary auditorium and rehearsal space for the **Luigi Cherubini Youth Orchestra** under **Maestro Riccardo Muti**.

This transformation, overseen by **I-DEA SrI** with lead designer **Lorenza Golinelli** and team members **Alberto Ricci Petitoni** and **Anna Pentella**, was completed in **May 2023**. The project, in partnership with the **Municipality of Piacenza**, aimed to light the space in a way that highlights and honours its artistic, musical, and cultural significance.



Photo Credits Oscar Ferrari



The design enhances the auditorium's eighteenth-century architecture and frescoes while accommodating various staging requirements. The installation features dynamic full LED lighting, adjustable via an app, offering diverse perceptions of the space tailored to each event. The architectural lighting, with a colour temperature of 3000K and a high colour rendering index, emphasizes the original hues of the space's materials and frescoes. Efforts were made to ensure the lighting fixtures remained discreet, preserving the hall's historic aesthetics.

This renovation significantly reduces energy consumption, replacing 255 old light fixtures with 228 **LED luminaires**, leading to a **78.3%** annual energy saving. This efficiency translates to **3.36 tonnes** less **CO2** emitted yearly and a reduction of **2.57 tonnes** of oil equivalent (toe) compared to the previous setup. **I-DEA**, a lighting design studio established in **2007**, has illuminated numerous Italian municipalities and specializes in a broad range of design and consultancy services, embodying a blend of research, artistic sensitivity, technical precision, and timeless aesthetics in each project.

Photo Credits Oscar Ferrari

We discussed this issue with Michael Rohde. Click here to explore the interview.



Photo Credits HZD Lighting

### The Glow that Reshapes History: Hzd Lighting's 'Cold River Rain Lane'

"Cold River Rain Lane" in Zhuanghang, Fengxian District, Shanghai, embodies a blend of history, culture, and modern innovation, revitalizing the ancient charm of a Yangtze River Delta water village. Led by Wang Cheng and the team at Hzd Lighting for Shanghai Fengxian Leng Jiang Yu Xiang Construction & Development Co., Ltd., this project completed in January 2022, transforms Zhuanghang Old Street, a heritage site dating back to 1368, into a cultural landmark. Spanning approximately 1000 meters, it preserves the architectural essence of the Ming and Qing dynasties, featuring restored historic buildings, traditional shops, and the serene ambience of "small bridges, flowing water, and dim lights."





Photo Credits HZD Lighting

The project, aiming to foster a new cultural identity for the **Yangtze River Delta**, marries ancient aesthetics with contemporary functionality. Through the subtle integration of sound, light, and technology, "Cold River Rain Lane" creates an atmosphere rich in emotional resonance and storytelling, distinct from the vibrant hustle of modern urban nightlife.

Its lighting design opts for elegance and restraint, evoking the gentle glow of sunset, enhancing the night with grace and high character, and offering a tranquil, grounded experience amidst the historic streetscape.

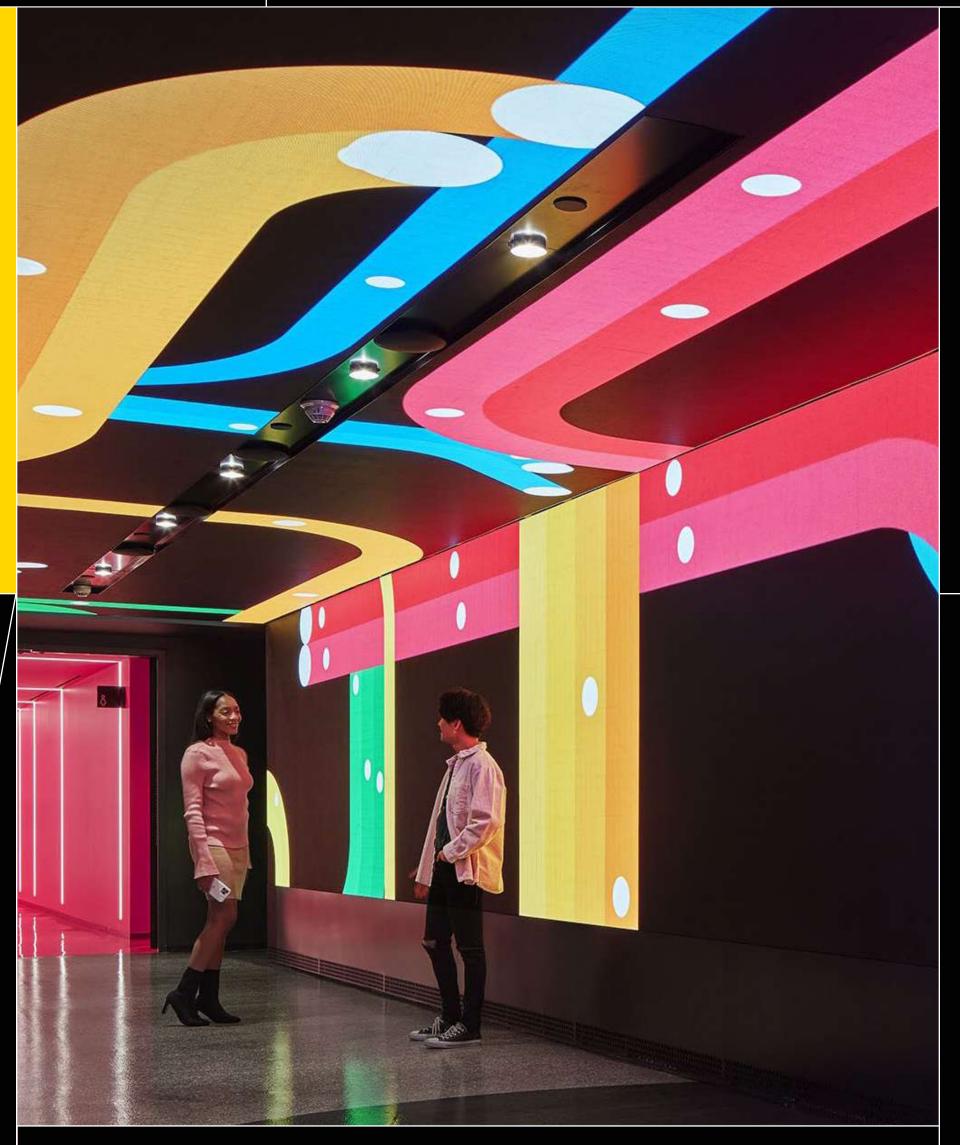


Photo Credits HZD Lighting

We discussed this issue with Gabriele Allendorf. Click here to explore the interview.



Photo Credits HZD Lighting



### Photo Credits Benny Chan – Fotoworks@Benny Chan

## Redefining Workspaces: Sean O'Connor Lighting and Architecture + Light's Vision for a Social Media HQ

The **US headquarters** of a notable global social media company, illuminated by **Sean O'Connor Lighting** in partnership with **Architecture + Light**, is a testament to the company's values of community, inclusivity, and joy.

Located in **Times Square, New York**, and spanning **160,000 SF** over five floors, the project showcases advanced lighting and controls to enhance a vibrant workplace reflective of the bustling city.



Photo Credits Benny Chan – Fotoworks@Benny Chan

Led by designers **David Hahn** (**Sean O'Connor Lighting**) and **Darrell Hawthrone** (**Architecture + Light**), with contributions from **Lida Khezri**, **Stacey Guevara**, and **Florin Panlilio**, the project was completed in **2022**.

The lighting design creates an immersive experience around a central five-level stair, supporting a diverse program of open workspaces, meeting rooms, production facilities, lounges, a cafe, and a striking double-height 'All-Hands' area overlooking Times Square. Utilizing backlit graphics, digital displays and architectural lighting the design transforms the workplace into a dynamic backdrop for social media content creation.

Innovative use of **coloured lighting** integrates with the architecture to offer a rich visual experience, while subtle shifts in light intensity mark the transition from day to night, defying conventional office lighting norms. The lighting design was meticulously planned with **sustainability in mind**, achieving **high illuminance for workstations and reducing the contrast in circulation areas**, all while maintaining energy efficiency beyond local requirements.

With over **70%** of workspaces receiving daylight and employing sensors and centralized controls, the project significantly lowers actual energy use, contributing to the client's sustainability goals.



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