

Notes from the webinar held on 15th May 2025

- Introduction and Webinar Overview: Helen introduced the webinar, emphasising its continuation from the SLL conference and the importance of maintaining the momentum of the conversation about balancing lighting and sustainability in urban environments.
 - Webinar Continuation: Helen emphasised that the webinar is a direct continuation of the dialogue ignited at the SLL conference, highlighting the importance of maintaining the momentum of the conversation about balancing lighting and sustainability in urban environments.
 - **Urban Lighting Balance:** Helen raised critical questions about how to strike a balance between lighting and sustainability, and how to foster ecosystems that thrive in urban environments even as cities grow and evolve.
 - **Global Interest:** Helen noted the growing buzz around the world among designers, city planners, environmentalists, and researchers exploring regenerative approaches to urban landscapes.
 - **Innovative Solutions:** Helen encouraged participants to share ideas and explore innovative solutions to create nightscapes that are energy-efficient and biologically friendly.
- **Panel Introduction and Format:** Helen explained the format of the webinar, including the recording of the session, the introduction of a panel of experts, and the allocation of 15 minutes to each of the five questions to be discussed.
 - **Session Recording:** Helen informed participants that the session would be recorded and the edited transcription would be posted on the conference website, allowing access to comments and responses.
 - **Inclusive Format:** Helen described the format as inclusive, with a panel of experts introduced to discuss five key questions, followed by an open floor for participants to raise questions or comments.
 - **Panel Experts:** Helen introduced the panel of experts, including Alan Howard, Mike Simpson, Peter Raynham, Ruth Kelly Waskett, Ryan Carroll, and Steve Fotios, highlighting their credentials and roles.
 - **Question Allocation:** Helen explained that 15 minutes would be allocated to each of the five questions, ensuring structured and focused discussions.
- **Lighting and Sustainability:** Claire Thomas from URBIS discussed the importance of sustainability in lighting, the challenges of light pollution, and the need for appropriate lighting on demand, referencing the French law implemented in 2018.
 - **Sustainability Importance:** Claire emphasised the importance of sustainability in lighting, discussing her extensive experience and the need to protect the night and improve sustainability through lighting.
 - Light Pollution Challenges: Claire highlighted the growing issue of light pollution, its impact on wasted energy, and the broader biological ecosystem, referencing the Campaign for Rural England's data on wasted light.



- **French Law Reference:** Claire discussed the French law implemented in 2018, which focuses on appropriate lighting on demand, considering the right type and quality of light for the location at the right time, controlled by the right system.
- **Technology and Standards:** Claire explored the challenges of interpreting standards, complying with them, and the impact on sustainability and decarbonisation, questioning whether technology enables better quality lighting or justifies more installations.
- **Case Studies and Research:** Claire Thomas presented various case studies and research projects, including the Greenway scheme in Ireland and the Dodder Valley Greenway in Dublin, highlighting the importance of adaptive lighting and the need for more research on the impacts of lighting on ecosystems.
 - **Greenway Scheme:** Claire discussed the Greenway scheme in Ireland, which supports the active mobility strategy using sensor inputs for lighting on demand, minimising light spill and understanding ecological impacts.
 - **Dodder Valley Greenway:** Claire presented the Dodder Valley Greenway in Dublin, a 14-kilometer linear park with adaptive lighting based on real-time demand, balancing ecological concerns and commuter needs.
 - **European Research:** Claire shared insights from European research schemes, such as the Heineken municipality study, which investigated the impact of dimming lighting on insect behaviour using AI and controlled studies.

Helen then moved on to the questions to be discussed.

1. Are Current Lighting Metrics (Luminance vs. Illuminance) Suitable for Today's Needs?

- Framing Question: Do current lighting metrics such as luminance and illuminance adequately address the environmental, experiential, and technological demands of modern outdoor spaces?
- Follow-up angle: Should we develop new metrics that better account for biodiversity, human wellbeing, or circadian impacts? Create a virtual box to calculate all directions receiving light.
- **Lighting Metrics and Standards:** Peter and Ruth discussed the limitations of current lighting metrics and the need for new metrics that account for biodiversity, human well-being, and circadian impacts. They emphasised the importance of practical, measurable metrics.
 - **Metrics Limitations:** Peter highlighted the inherent flaws in current lighting metrics, emphasising that they are based on experimental data and assumptions that may no longer be valid.
 - **Holistic Impact:** Ruth argued that current metrics focus too much on visual tasks and do not capture the holistic impact of light on humans, animals, and insects, suggesting the development of an index that accounts for colour temperature, spectral composition, quantity, and directionality.
 - **Practical Measurement:** Ruth stressed the importance of grounding new metrics in practical, measurable terms, noting the dominance of illuminance and luminance due to their ease of measurement with handheld instruments.



• **Visual Task Reassessment:** Mike suggested reassessing the visual task periodically to better understand what enables people to see and how light affects flora, fauna, and animals, starting from the fundamental purpose of lighting.

2. Cross-Disciplinary Collaboration: Sharing Objectives and Shaping Policy

- Framing Question: How can the lighting profession collaborate more effectively with urban planners, ecologists, and public health experts to inform policies that reflect shared sustainability and well-being goals? How can we inform government policy?
- Follow-up angle: What barriers exist in aligning objectives across disciplines, and how might they be overcome?
- Cross-Disciplinary Collaboration: Allan Howard and Mike Simpson highlighted the need for better collaboration between lighting professionals, urban planners, ecologists, and public health experts to inform policies that reflect shared sustainability and well-being goals.
 - **Government Engagement:** Allan discussed past efforts to engage with the government, such as the House of Lords Science and Technology Committee's investigation into the impact of artificial light, and the challenges faced in influencing government policy.
 - **Local Authority Policies:** Ryan emphasised the importance of local authorities developing strategic development strategies that include strong light pollution policies, ensuring consistent quality lighting across the country.
 - **Unified Guidance:** Peter suggested creating a model lighting ordinance that local authorities could adopt, providing consistent guidance and reducing the burden on individual authorities to develop their own policies.
 - **Professional Collaboration:** Allan and Mike highlighted the need for lighting professionals to collaborate with urban planners, environmental teams, and other stakeholders to influence planning and policy effectively.

3. Expanding the Role of Lighting: Regenerative Futures

- Framing Question: Should the primary role of outdoor lighting evolve from simply illuminating spaces to actively contributing to regenerative urban and ecological systems?
- Follow-up angle: What would a lighting strategy look like if it were designed to restore, rather than just minimise harm to, nature and society?
- **Expanding the Role of Lighting:** Ruth Kelly Waskett and Mike Simpson discussed the potential for outdoor lighting to actively contribute to regenerative urban and ecological systems, emphasising the need for a holistic approach and considering outdoor spaces as part of people's living environments.
 - **Holistic Approach:** Ruth emphasised the need for a holistic approach to lighting design, considering the impact on humans, animals, and the environment, and integrating various disciplines to create inclusive and sustainable lighting strategies.



- Living Environments: Mike discussed the trend of outdoor spaces becoming part of people's living environments, especially in urban areas, and the need to design lighting that enhances these spaces for recreational use.
- Adaptive Lighting: Ryan highlighted the importance of adaptive lighting strategies that balance human needs with environmental concerns, using technology to create responsive and sustainable lighting solutions.
- **Emotional Response:** Ryan suggested incorporating elements of theatre into outdoor lighting design to create emotional responses and enhance the experience of outdoor spaces.

4. Navigating Guidance Overload: Helping Clients Choose Wisely

- Framing Question: With an overwhelming amount of lighting guidance available, how can designers lead clients to make context-sensitive, sustainable choices?
- Follow-up angle: Is the real challenge a lack of guidance or a lack of clarity and prioritisation within existing frameworks?
- **Navigating Guidance and Overload:** David Mooney and Ruth Kelly Waskett addressed the challenge of navigating the abundance of guidance documents, emphasising the importance of setting a basis of design and involving clients in the decision-making process.
 - **Basis of Design:** David emphasised the importance of setting a basis of design and involving clients early in the decision-making process to ensure the use of relevant standards and guidance.
 - **Client Involvement:** David discussed the need to educate clients about the appropriate standards and guidance, ensuring they understand the rationale behind design decisions and feel confident in the process.
 - **Inclusive Design:** Ruth highlighted the opportunity to use inclusivity as a design stimulus, considering the needs of diverse populations and creating environments that are welcoming and accessible to all.

5. Public Education: Why Is Awareness Still So Low?

- Framing Question: Why is it so difficult to raise public awareness about the impacts of outdoor lighting, despite it being a relatively accessible entry point for sustainable change?
- Follow-up angle: What role should the lighting profession play in public outreach, and which communication strategies have the greatest potential for success?
- **Public Education and Awareness:** Ruth Kelly Waskett and Allan Howard discussed the importance of public education and outreach, suggesting strategies such as producing informative signage for retail stores and leveraging media to raise awareness about the impacts of outdoor lighting.



Follow-up tasks:

- **Public Education on Lighting:** Develop a strategy to engage with the press and media to raise public awareness about the impacts of outdoor lighting. (The team)
- **Public Education on Lighting:** Create informational signage for retail stores to educate consumers about the impact of different types of exterior light fittings. (The team)
- **Public Education on Lighting:** Consider developing a YouTube channel to provide educational content on various aspects of lighting, including outdoor and indoor lighting, LED explanations, and dimming. (The team)
- **Inclusivity in Lighting Design:** Explore the development of guidance that addresses the needs of neurodiverse individuals and other diverse groups in lighting design. (The team)
- **Model Lighting Ordinance:** Collaborate with the UK Lighting Liaison Group to develop a model lighting ordinance that local authorities can adopt for consistent lighting policies. (The team)
- **Public Education on Lighting:** Investigate the possibility of creating a Bank of videos to educate the public on various lighting topics and promote the YouTube channel. (The team)