

The role of the private sector in public lighting planning

Enhancing co-operation between public and private sector in lighting planning engages different stakeholders in improving city development.

Benefits of including the private sector in lighting planning^{1,2}

Due to urbanisation, cities are growing intensively with a rapid growth of population. This leads to an expansion of industrial and shopping areas. Concentrated energy use leads to greater light pollution with significant impact on human health and surrounding ecology.

Cities should identify specific target groups such as industry, retail, and sports clubs, and empower them to use and understand sustainable lighting concepts. By creating private-public partnerships, cities can provide more holistic and comprehensive lighting master plans, to reduce the overall brightness of the urban environment and the wider impacts of light pollution. Incorporation of private sectors is a key element in successful urban planning.

Heading towards more liveable and sustainable cities requires involving target groups – industry, retailers, etc.³

- ▶ The UN defined the SDGs (Sustainable Development Goals) to provide guidelines for building sustainable societies around the globe. The goals include “decent work and economic growth” (SDG 8) and “sustainable cities and communities” (SDG 11).
- ▶ Industrial areas are mostly located far away from the city centre, close to urban green spaces near. These places often threaten ecosystems with an inefficient, unappealing, or unnecessary use of artificial lights with a lack of understanding for sustainable lighting concepts.
- ▶ The cities should include these industrial areas in their lighting investments by advising their architectural concepts and choice of lighting that best-suit their needs.
- ▶ Light pollution can also be caused by window lighting in retail areas around the inner cities. Therefore, it is necessary to empower retailers to invest in sustainable lighting concepts for shop windows, especially when the shops are closed at night.



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Incorporate private sector and civil society (e.g. shop retailers, industries, sports clubs, etc.) into public lighting plans, also when lighting regulations are already in place.

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Identify target group-specific technical and communication concepts

- Build an open platform for discussion between civil society, retailers, industries, experts, and policy makers.
- A wide range of disciplines need to be engaged and communicated.
- Both private and public sectors need to benefit from the decision being made; hence prior research is necessary to create questions based on the needs of all the stakeholders.

Methods and tools to involve target groups in lighting planning:

- “Round table” – regular public discussion forums.
- An integrated database with information from all sectors involved.
- Workshops and presentations to share expert knowledge.
- Excursions arranged by experts, to visit remote regions and share their insights.

“Experts to Experts”

- Professional lighting experts can plan the lighting, also for private industrial buildings and retail shops.
- To bring different experts together, cities need to invest in prior research and prepare critical, yet innovative, questions.
- Bringing experts together could mean finding a middle ground for different interests (e.g. environmental protection from light pollution vs. economic prosperity and marketing efficiency).
- Addition of new third-party input can be helpful to enrich the discussion.
- The forum should incorporate an interdisciplinary framework to openly share different perspectives (e.g. urban planners vs. ecologists).
- Industries and retail businesses need to understand economic profits that can be obtained from installing sustainable lighting.

Establish public-private partnerships

- The target group suggests the topic (e.g. industrial lighting, shop window lighting, etc.).
- Each target group prepare precise and specific questions for lighting design.
- Cities need to prepare answers and appropriate actions by involving a number of departments within their administration.
- Provide case studies for the target groups specific to the topic of discussion.

References:

- 1 Hänel, Andreas (2019): Light pollution in cities – challenges between marketing, public safety and environment. (Unpublished) Presentation 07.11.2019 – Workshop-Economy of Public Lighting. Hamburg.
- 2 Gouvernement du Grand-Duché de Luxembourg (2018): Mouvement écologique (Leitfaden „Gutes Licht“ im Außenraum für das Großherzogtum Luxemburg. Wirkung nächtlicher, künstlicher Beleuchtung auf Fauna und Flora). Luxembourg. www.emwelt.lu

- 3 UN-SDG: <https://www.un.org/sustainabledevelopment/cities/>, <https://www.unenvironment.org/regions/asia-and-pacific/regional-initiatives/supporting-resource-efficiency/sustainable-cities>