Urban Transitions Mission's Knowledge-Exchange Program

Lighting Cities

Session 2

Manage, monitor, and control lighting with connected and integrated solutions

Dates: 30 May, 2024 **Time:** 13:30- 15:00 (CEST)

Register: here

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Overview of the Program

Urban areas, as hubs of innovation, economic activity, and cultural exchange, are also significant contributors to global Greenhouse Gas (GHG) emissions, largely due to their energy consumption patterns. Lighting, a fundamental aspect of urban infrastructures, offers a unique leverage point for cities aiming not only to decarbonize, but also to improve safety, security, and liveability. In the quest to address integrated solutions to curb carbon emissions and support well-being of communities, the Urban Transitions Mission is partnering with global lighting solution leader Signify to amplify knowledge and access to integrated solutions for public outdoor and indoor lighting.

Though this partnership UTM and Signify aim to help advance the adoption of innovative lighting solutions, to fully tap the decarbonization and cost reduction potential of lighting, as part of more comprehensive transformation plans and renovation pathways.

The UTM and Signify will host four (virtual) sessions of a knowledge-exchange program focusing on **public indoor and outdoor lighting technologies and integrated solutions for cities** over May-September, 2024. These sessions, designed to share knowledge, build capacity, and evaluate the impact of these lighting solutions, will address topics such as safety and security, connected lighting systems, circular lighting principles, and innovations in public building renovations.

Each session will focus on a specific aspect and will last 90 minutes, to include an introduction to the topic, an intervention of an expert from Signify and the experience of a UTM city on that specific field, followed by an interactive discussion. Guiding questions will be shared with the agenda well ahead of each session, in order to allow cities to identify the right participants and prepare ahead of the training.

Please find the agenda below, as well as the overview of the entire programme and of the collaboration between UTM and Signify.

This knowledge-exchange program aims to be as much interactive and practical as possible. We therefore encourage UTM cities to share in advance their experiences, perspectives, interesting use cases. If you would like to share your interesting project as a case study to be presented and discussed at a relevant session, please don't hesitate to contact UTM as soon as possible. We also welcome UTM cities to share questions in advance around the topics to be covered in a given session.

These exchanges are dedicated to urban energy planners and urban planning officials, as well as experts from local energy agencies and municipally owned companies that support the city in their energy and digital transition. Please let us know which experts you intend to engage.

The exchange will be accessible upon registration – please find here the link to register to this session, and below the links for all the sessions.

If you have any question or suggestions, please reach out to UTM Team via utm@globalcovenantofmayors.org

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Learning objectives of the Session 2 "Manage, monitor, and control lighting with connected and integrated solutions":

- Optimize outdoor space lighting through data management, IoT and digital solutions.
- Use smart lighting technology to manage peaks and network congestion, to handle in real-time faults and outage, to adjust lighting levels and cutting waste based on people and traffic density.
- Offer 5G/WiFi/LiFi connectivity through existing lighting network infrastructure, integrating sensors and device in open and scalable future-ready platform.
- Select connected platform enabling data security and protect against cyber-threats.

Agenda

13:30 CEST	**Welcome** – *Giorgia Rambelli, Urban Transitions Mission Director*
13:35 CEST	**Introduction to the session: Digital and connected Lighting** – *Mario Giordano, Global Head of Public and Governmental Affairs, Signify* • Digitalization is transforming lighting infrastructure. • Enhanced and customized energy saving. • Co-benefits of connected lighting solutions
13:40 CEST	**Manage, monitor, and control lighting with connected and integrated solutions** – *Yong Liang Eng - Global Segment Director - Road & Street & Cities, Signify* • Optimize outdoor space lighting through data management, IoT and digital solutions. • Use smart lighting technology to manage peaks and network congestion, to handle in real-time faults and outage, to adjust lighting levels and cutting waste based on people and traffic density. • Offer 5G/WiFi/LiFi connectivity through existing lighting network infrastructure, integrating sensors and device in open and scalable future-ready platform, using connected platform enabling data security and protect against cyber-threats
13:55 CEST	**Case study: Partnering with the ecosystem to accelerate the energy transition using circular and connected lighting solution: City of Chieti (Italy)** – *Fabrizio Ruggiero, AD Lumagest – City Green Light Group, Alessandro Bortoletto, Innovation Manager City Green Light* • Combining sustainability needs and finance mechanisms. • Extended ecosystem as enabler and accelerator of the transformation. • Technical requirements to implement advanced connected solutions
14:10 CEST	**Q&A and discussion**– *All participants moderated by Yong Liang Eng - Global Segment Director - Road & Street & Cities, Signify and UTM* • What are the basic requirements of the infrastructure to plan digital lighting solutions? • How to facilitate the dialogue between financial, technical, operational, and political stakeholders? • How to secure the return of the investment for all parties? • What are the capabilities required to execute the transformation combining hardware and software, wiring and clouding, exiting and new devices?
14:55 CEST	**Wrap up and next steps** –*Urban Transitions Mission*
15:00 CEST	**End**

Complete programme of the

UTM-Signify Lighting cities

Online training programme

Session 1 (23 May) – REGISTER HERE

The co-benefits of well-planned and well-managed city lighting and the role of public outdoor lighting for safety and security

Learning objectives:

- Design integrated and harmonized lighting, enhancing the value of city through lighting master-planning.
- Free up electricity to enable electrification and support the energy transition, converging energy saving with economic and cultural identity needs.
- Light the night to make citizens feel protected, reducing micro-criminality and traffic security without wasting energy.

Sessions 2 (30 May) – REGISTER HERE

Manage, monitor, and control lighting with connected and integrated solutions

Learning objectives:

- Optimize outdoor space lighting through data management, IoT and digital solutions.
- Use smart lighting technology to manage peaks and network congestion, to handle in real-time faults and outage, to adjust lighting levels and cutting waste based on people and traffic density.
- Offer 5G/WiFi/LiFi connectivity through existing lighting network infrastructure, integrating sensors and device in open and scalable future-ready platform.
- Select connected platform enabling data security and protect against cyber-threats.

Session 3 (12 Sept) – REGISTER HERE

Reducing environmental impacts through circular lighting principles & plans

Learning objectives:

- Explore Ultra Energy Efficient lighting solutions and technology trends and developments.
- Enhance renewable energy with pure and hybrid solar street lighting, provide lighting where grid is not available or expensive to build.
- Consider long term perspective with upgradable, reparable, recyclable designed solutions and efficient use of materials including 3D printing manufacturing.
- Investigate the potential consequences of excessive and wrong artificial light at night on human and wildlife health, understanding the ecological impact of lighting pollution.

Session 4 (19 Sept) – REGISTER HERE

Innovations for public building renovations and advanced indoor lighting solutions

Learning objectives:

- Combine natural and artificial lighting in buildings, supporting circadian biorhythm and enhancing comfort.
- Acknowledge the benefits of good lighting design for health and well-being of people living indoor.
- Enhance experience for museums, theatres, exhibitions, events.
- Create smart and dynamic learning and education environment in schools.

Study tour - Outdoor Lighting Application Center, Lyon, France

Within the framework of the UTM Global Innovation Summit, planned to take place on the first or second week of October in Brussels, selected cities will have the opportunity to visit the Outdoor Lighting Application Center (OLAC) in Lyon, France. This will take place on the 8-9 or 15-16 October (tbc).

Please reach out to the UTM team if you wish to apply for this opportunity, sharing the details of your interest and what would you like you learn from that.

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About Signify and the collaboration with UTM

Signify is the world leader in lighting for professionals, consumers and lighting for the Internet of Things. Its energy efficient lighting products, systems and services enable its customers to enjoy a superior quality of light, and make people's lives safer and more comfortable, businesses more productive and cities more liveable.

With 2023 sales of EUR 6.7 billion, approximately 33,000 employees and a presence in over 70 countries, they're unlocking the extraordinary potential of light for brighter lives and a better world. www.signify.com

NOTE: UTM and Signify collaborate in the framework of a non-commercial MoU with a confidentiality agreement and without prejudice to UTM's integrity, independence, and impartiality in delivering support to the cities part of its cohorts.

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