

A nighttime cityscape featuring several illuminated skyscrapers. The buildings are lit up with various colors, including blue, white, and yellow. In the foreground, there are light trails from cars on a road, and a large, curved glass building is visible on the right side. The overall scene is vibrant and modern.

**PHILIPS**

Lighting University

# The future is exciting

Connected lighting in smart cities

**Light+Building**  
Expert speaker program



# Empowering cities with connected lighting

Susanne Seitinger and Nancy Clanton spoke to a group of lighting professionals at Light+Building 2016 about how connected lighting can serve as an enabler and a catalyst for transitioning to a new era of city technologies.

**Watch the video on:**

<http://www.lighting.philips.com/main/education/lighting-university/lighting-university-browser/event/light-and-building-speaker-program.html>



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Using smart connected systems, municipalities can cut their energy cost by half to two thirds”

**Nancy Clanton,**  
Clanton & Associates Lighting Design and Engineering

**Seitinger** outlined five challenges cities are facing today along the way to becoming smart cities.



**Environmental challenges and energy conservation**



**Connectivity – leveraging the power of connectivity**

- Adding control
- It, data, back up, security



**Meeting the diverse needs and expectations of the community**



**Meeting financial challenges by leveraging LED energy savings**



**Future proofing on all levels, including interfaces, scaling and roll-out schedule**

- City asset management
- Software
- Network
- Assets



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Connected lighting really can serve as an enabler, a catalyst for transitioning to a new era of city technologies”

**Susanne Seitinger,**  
Global Sub-segment Manager, Public Segment, Professional Systems, Philips Lighting

**While cities today face many challenges when it comes to lighting infrastructure, being thoughtful about planning and execution is crucial to a successful design.**

**Clanton** addressed many of these issues in terms of lighting infrastructure and discussed how her research is helping city officials and other leaders understand the unique needs of growing urban areas. Her goal is to pave the way to more successful and integrated city lighting plans in urban areas across the US and abroad.

**Environmental** – blue light causes sky glow or light to spill unwelcome into bedrooms – a possible solution is sky glow mapping and analysis of the impact of changes beforehand. This is why controls are so important. You can control the level of light across an entire city from one location.

**Installing controls** allows for a central management system where street light status is always available. Asset management is easier, including operational status. User interface must be simple and straightforward.

**Community lighting** helps to involve the citizens as they are central to a city’s lighting plan goals. Officials should be lighting for pedestrians rather than cars. Street lights are the most valuable real estate a city official has.

You can use your street light as a node in a smart grid and it can become a revenue source rather than an expense. Your street lighting can communicate.

**The payoff** for the initial investment is less than 7 years with possible savings of 10 million every year.

**The future is exciting** – think of what lighting can be used for going forward – and initial installation can ensure longevity of the investment. Connected lighting is a communication hub and provides resiliency where a city’s hardscape turns into an energy source.



Think of lighting as revenue rather than cost and determine how to leverage the power of connectivity. Put light where and when it’s needed and use the data collected to meet the diverse needs and expectations of a city.

**The lighting landscape is changing and it will be exciting to see what’s next.**

