

SSL Postings

U.S. DEPARTMENT OF ENERGY

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Calling All Revolutionaries

Anyone not holed up in a hermitage deep in the woods knows that there's a second lighting revolution looming on the horizon, following closely on the heels of the one ushered in by LED technology. That second revolution involves [connected lighting](#), which has been made possible by the advent of SSL and holds the potential to not only take lighting quality and energy performance even further, but also to improve the energy performance of non-lighting systems and, in the bargain, enable a wide array of other benefits, services, and revenue streams.

That vision, of course, is a long way from being realized – which is why DOE, in its role as convener and facilitator, will hold its [third annual Connected Lighting Systems \(CLS\) Workshop](#) June 7-8 in Santa Clara, CA. Cross-cutting collaboration is absolutely essential if the full benefits of connected lighting systems are to be realized, so the workshop will bring together top experts from the lighting and IT industries to take a close look at key issues, and to discuss what actions are needed to move connected lighting forward.



So if you've got any kind of stake in the connected lighting game – and there are few in the lighting industry that don't, even if they haven't realized it yet – I invite you to join us in Santa Clara and take a deep dive into connected lighting's most pressing questions. For example, what are its potential risks and rewards, and how will the seismic shift that's coming fundamentally

change lighting and the lighting industry? You'll hear from lighting manufacturers, distributors, and industry associations, all giving their own perspectives.

We'll also discuss how well today's connected lighting systems are meeting lighting, energy saving, and other expectations of end users in various sectors, such as healthcare and banking, and how such systems might better serve their needs in the future. A facilitated discussion between panel and audience will provide ample chance for everyone to weigh in on this question, which should reach some interesting conclusions.

Another hot topic at the workshop will be how connected lighting systems are currently being integrated with non-lighting systems – a prerequisite for many of connected lighting's value propositions. A panel of experts will review, compare, and contrast some of the integration approaches being taken in existing real-world projects, as well as some of the standards, specifications, and other tools that are being leveraged to enable these approaches.

The increasing number of operational states and related power draws that are possible in connected lighting devices is making it difficult to describe their energy performance in traditional ways. While many available connected lighting systems provide some form of energy self-reporting capability, the accuracy of the reported values – not to mention which system components are responsible – is often unclear. A workshop panel will discuss some of the needs for energy data and the techniques by which those data are reported and analyzed in various system implementations, and offer thoughts on what the future for energy data should be and how to get there.

The benefits provided by new and increasing connectivity in lighting and other systems must, of course, be weighed against real and perceived risks, so the issue of cybersecurity will be explored. Experts will offer suggestions on how to manage the inherent risks of connected lighting; describe strategies, services, and testing regimes for characterizing connected lighting systems for cybersecurity vulnerabilities; and offer best-practice advice for using such resources to manage risk when specifying systems today and in the future.

There'll be lots of other topics covered as well in Santa Clara – such as inter- and intra-luminaire protocols, and the groundbreaking studies being conducted at DOE's [Connected Lighting Test Bed](#) – with speakers representing such organizations as Philips LED Electronics, Leviton, Georgia Power, the DesignLights Consortium, Fulham, the Illuminating Engineering Society of North America, Star Lab, Mitre Corporation, the U.S. General Services Administration, and Cisco.

Connected lighting is coming on like a freight train, but the tracks haven't been completed yet. Come to Santa Clara and help us continue to build them, to ensure that the train we're all awaiting has a smooth ride and delivers its freight intact.

For more information on the workshop, or to register, visit the [DOE website](#).
And check out our [online resources on connected lighting systems](#).

Best regards,
Jim Brodrick

As always, if you have questions or comments, you can reach us at
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