

Expert tips for smart lighting

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There is more to lighting a building than just choosing the right bulbs. Having the right technology saves energy costs and increases the well-being and comfort of building users. In Germany, Caverion cooperates with OSRAM lighting experts.

Klemens Restle, Global Key Account Manager at OSRAM explains when it is worthwhile to renovate a lighting system, and what 'biological light' is about.

Why should building operators look into lighting?

Lighting is one factor you can tweak to reduce the energy costs of a building. Depending on the type of building, it may account for anywhere between 30 and 50 percent of energy consumption. So a modern lighting solution is a huge cost-saver. Most efficient are LED luminaires coupled with an intelligent lighting control system.



How much energy saving potential is there?

Depending on the type of building and its utilisation, you can save up to 80% of lighting costs. The actual amount depends on three main factors: the age of the lighting system, the price of electricity and how long the lights stay switched on. The higher the price of electricity and the longer the lighting is in use each day, the faster the investment pays off. Building users' behaviour is another factor. In areas that are irregularly utilised, such as connecting passageways, it is worthwhile to deploy presence detectors.

An energy audit provides the most accurate means to assess savings potential. For example, this was done with great success at HAVI Logistics Group, where a new lighting concept was developed on the basis of measurements performed beforehand. Electricity savings accruing from the lighting system were as high as 80 percent in some logistics halls.

Lower energy costs aside – what else can modern lighting technology do?

Lighting used to be considered mainly from technical and functional standpoints. Now we have new approaches focused on people. Human Centric Lighting – biologically active light in the workplace – accommodates this. Not only does it help to stabilise our day/night circadian rhythms, it also enhances people's well-being and concentration in the workplace.

It would seem there is more to lighting than choosing the right bulbs. What is the technology behind it?

That is an important point because to date, many people perceive light as just something you switch on or off. Modern light management is considerably more complex than that. It includes networked hardware and software components and may extend all the way to wireless solutions such as LightifyPro, which are so flexible as to make each luminaire individually controllable.

That demands technical know-how.

Precisely. Which is why the partnership with Caverion is so extremely useful: our combined competences optimally integrate modern lighting solutions with existing building services engineering. Also, when we both cast an eye over the technology beforehand, the result is more intelligent project planning.

Caverion designs, builds, operates and maintains user-friendly and energy-efficient technical solutions for buildings, industries and infrastructure. Our services and solutions are used in commercial and residential buildings and on industrial and public sector properties, as well as in processes, ensuring business continuity, safety, healthy and pleasant surroundings, optimal performance and cost management. Our vision is to be a leading European provider of advanced and sustainable life cycle solutions for buildings and industries. Our strengths include technological expertise and comprehensive services, covering all technical disciplines throughout the entire life cycles of properties and industrial plants. Our revenue in 2016 was approximately EUR 2.4 billion. Caverion has about 17,000 employees in 12 countries in Northern, Central and Eastern Europe. Caverion's shares are listed on Nasdaq Helsinki. www.caverion.com

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