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LED technology-The disruption in lighting industry

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The Indian lighting industry is growing at a rapid pace, particularly due to the demands for increased energy efficiency amid environmental concerns, and new "smart" technology being embedded in lighting for use in homes, offices and cities.

According to a report by Electric Lamps and Component Manufacturers Association of India (ELCOMA), the lighting industry is expected to reduce energy consumption for lighting from the present 18% of total power consumption to 13% by 2020, by introducing more energy efficient products and working more closely with the government to execute various schemes and awareness programmes.

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However, we can't always enjoy the benefits of natural light, especially during the nights. Hence, we require the drama of artificial lighting to make a space come alive through Lighting Design and technology.

Lighting as an aspect, needs to be identified as more than just a beautification feature; it needs to be acknowledged as a basic essence of life after food and water, as a necessity and then capitalized on with the same approach. Its role needs to be perceived at the largest spectrum; how it augments spatial quality, increases material perception, moods, how it embodies our sensory perception and enhances our sensibilities and emotions. The intent should be to always augment experience and not to mimic environments and encounters.

Ten years ago, when LED technology was introduced in the lighting sector, it didn't seem possible that the industry would be able to embrace the new, evolve, and move forward. As lighting is becoming smart it's no more just a matter of sockets, switches and bulbs. These smart lighting solutions are now sensor integrated and perform various other activities such as human activity monitoring, balancing the demand and supply fluctuations in power and much more.

Furthermore, LED technology, automation, connectivity, intelligence and the internet of things continue to drive change in the Lighting industry by exploring the capabilities of more powerful and cost-effective wireless connectivity, high-efficiency light sources, innovative high-performance materials and many other new and emerging technologies to optimize human-made and natural systems (such as daylight) and to provide efficient, high-quality lighting, heating, cooling, ventilation, and information exchange.