

Christmas lights in cities: light shows or a waste of energy?

- Light pollution is becoming a major problem in cities
- Renowned specialist in light pollution, Susana Malón, believes it is necessary to create a new culture surrounding light

Zaragoza 28/11/2019 - Christmas is just around the corner and with it, the streets of towns and cities worldwide are filled with lights of all shapes and colours possible to help create a warm and convivial atmosphere.

But are we aware of the light pollution present in our cities with which we live every day?

According to a report published by the United Nations, by 2050, 70% of the population is expected to live in cities. One of the major challenges facing cities in order to be sustainable and innovative is the need **to** adapt their design to meet



the needs of their inhabitants and visitors, taking into account their diversity.

The fact is that our cities are the main emitters of contaminants in general. Indeed, they produce more than 70% of global pollution and, among the contaminants most emitted by the conurbations are those relating to lighting fixtures.

Light pollution is one of the environmental problems that has grown the most in recent years, mainly due to night-time outdoor lighting in urban environments, whose negative impact above all affects nocturnal ecosystems including species of plants and animals





as well as people. This light pollution has surged in the last 10 years in Spain, to rank third in Europe as the country with the highest levels of light pollution.

Susana Malón, one of the world's leading specialists in light pollution, believes that "we must create a **new way of thinking as regards light**. Excessive illumination is not seen as pollution and this is a problem if we would like our cities to be both habitable and sustainable. We need to increase the quality of the lighting to bring residents enhanced levels of comfort at the same time as improving energy efficiency".



We cannot be absolutely what the sure physiognomy of the cities of the future will look like. What we do know however, is that technology is already playing a key role and that smart street lighting is here to stay, as it not only brings benefits in terms

of energy efficiency but also helps reduce the excess of artificial light to which our urban centres are subjected.

According to experts, **reducing the amount of light does not mean less safety or visibility**. We are not talking about turning off street lights or changing them all in one go. Among other solutions, we need to adjust lighting levels to match international recommendations; install LED luminaires; and above all, use light responsibly to only illuminate the areas required, from the top to bottom and without letting the light spread towards other areas.

"Improving the **efficiency of street lighting** is one of the most immediate challenges. An efficient and cost-effective lighting is possible. Thanks to management and control systems, we can already reduce output and achieve appropriate and sustainable lighting levels, without impacting on the quality of the light", comments Malón.





ELT contributes to sustainable street lighting

Effective and efficient outdoor lighting must combine energy efficiency and design technologies for optimal lighting as well as achieve aesthetic and lighting criteria to minimise environmental impacts.

The EXEYA and ELODIA street lighting fixtures from ELT are **designed to adapt to the most demanding needs** and are equipped with high performance LED modules and drivers that are able to adjust the colour temperature, as well as a wide range of programmable options and multiple dimming modes.





EXEYA and ELODIA comply with the lamp and ballast requirements and parameters established by the regulations on energy efficiency for outdoor lighting installations, for the **most demanding environmental zones** that must be protected from light pollution: E0 (areas with intrinsically dark landscapes such as major international

astronomical observatories) and E1 (relatively uninhabited rural areas where the roads are unlit), offering options that include the appropriate colour temperatures for such areas such as PC Amber and 2200K.

About us:

ELT - Especialidades Luminotécnicas S.A.U. is a Spanish business group specialised in the design, manufacture and marketing of lighting solutions and which, over its more than 40 years, has achieved a leading position in the market.

With a clear focus on quality and technology supported by innovation and the development of new products and tools, ELT dedicates considerable resources to bringing advanced technological solutions to the market





covering connectivity, smart street lighting management, customised engineering projects and system interoperability and luminaires.

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