



## Environmental Impact Assessment

The positive environmental impact of Lemóva lighting solutions is primarily driven by the energy efficiency of LED technology and the reduction of hazardous substances commonly found in traditional lighting sources such as fluorescent lamps (FL) and high-intensity discharge (HID) lamps.

Lighting designs are developed to deliver precise optical control, ensuring light is directed only where it is needed. This approach maximizes energy efficiency while also helping to reduce light pollution and its negative effects on biodiversity and the night environment.

When evaluating lighting sustainability, the emissions generated during the use phase of a product significantly outweigh the environmental impact of its manufacturing. Lighting accounts for a notable share of global electricity consumption, and more than 90% of a luminaire's carbon footprint typically occurs during operation. For this reason, Lemóva places strong emphasis on high in-use efficacy, as even small improvements in real-world performance can result in substantial long-term carbon savings.

A modular design approach enables the combination of fewer parts and tools into a wide range of product configurations. This reduces the need for producing, transporting, and warehousing large numbers of end products, while also minimizing the total number of molding tools required.

A broad range of standard products, along with custom design support, assists luminaire manufacturers and project stakeholders in developing optimized solutions for improved lighting quality and higher energy efficiency across general and specialized applications, including horticultural lighting.

Environmental responsibility also extends to operational practices at Lemóva, focusing on environmental compliance, efficient material and energy usage, appropriate handling and reduction of waste, and lowering the overall carbon footprint. Internal initiatives prioritize optimization of the logistics chain and product packaging to minimize direct climate impact.

