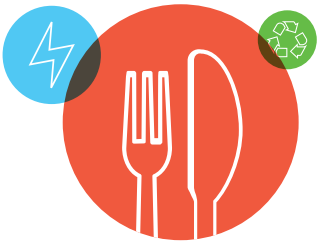
Lighting System “Listens” to Plants



ENVIRONMENTAL

The system can reduce CO2 emissions by 21 million metric tons annually if used by 20% of the market.[1]

ECONOMIC

Reduction in energy costs and waste, as well as increased yield, improve economic and environmental performance.

→ With LED lighting systems including smart biofeedback, Heliospectra automates plant production while achieving longer durability, energy savings, and increasing yield.

The Heliospectra LED lighting system with biofeedback “listens” to plants by using reflected light and fluorescence. This information helps the system optimize the light spectrum to **produce only the necessary light** required, while encouraging desired plant characteristics. The result is energy and water saved, **yield increased, waste reduced**, and quality improved.

A software management system provides growers with improvements based on the results of the whole grower community. The data is **aggregated in an online database** with predictive algorithms creating the best light conditions for growers depending on the type of crops and environmental conditions.

Why a Sustainia100 solution?

With changes due to global warming, increased population, and urbanization, there is a need for locally produced food with continuous and regular crops. With LED-based lighting systems, it is possible to reduce energy costs, create healthier and more durable plants, and reduce waste as well as the need for transportation.

Developed in Sweden, UK, USA, Australia

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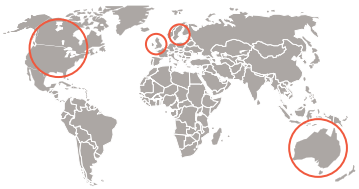

The smart lighting system consists of remotely controlled, adjustable-spectrum lights combined with sensors that provide information on how the plants are using the light.

[1] WWFClimate Solvers, “L4A Efficient Greenhouse Lighting.”