PHILIPS

Horticulture
LED Solutions

Case study
Florensis

Naivasha, Kenya

Philips GreenPower LED flowering lamp

# High-quality cuttings and **energy savings**

“We are now consistently producing more uniform and stronger plants.”

“We were impressed with the results: no flower induction, and a reduction of over 80% in energy costs. At the same time we have reduced our impact on the environment, **creating a real win-win situation**!”

**Eddy Verbeek,** General Manager Florensis

## Background

Florensis supplies professional growers with young plants propagated from both seed and cuttings. The company’s head office and primary production site are located in the Netherlands. Its three sites outside the Netherlands – in Kenya, Ethiopia and Portugal – play a major role in the production of unrooted cuttings. The farm in Kenya has developed rapidly in recent years and currently covers 14 ha. The modern production facilities here are used to produce cuttings for the farm’s range of bedding plants, including Pelargonium, Impatiens, Phlox, and Poinsettia.

## The challenge

Florensis Kenya is located on the equator, where the natural conditions are daylight-neutral. However, a number of mother stock plants, including Poinsettia, need long-day conditions in order to prevent flower initiation. Florensis Kenya wanted to improve the internal quality of its cuttings whilst at the same time reducing its carbon footprint. Various Poinsettia varieties are sensitive to the day length, with the result that the lighting conditions and light spectrum play a vital role in ensuring that the best possible quality and the required yield are achieved.

## The solution

Florensis Kenya trialed Philips GreenPower LED lights for various crops and varieties on a semi-commercial scale. They worked together with researchers from Philips and their certified partner for Africa, UFO Supplies BV, to select lamps with the correct PAR spectrum for these trials. After only one season optimum results had been achieved and the decision was made to invest in Philips GreenPower LED lighting for the entire Poinsettia production


**Benefits**
The existing 150 watt bulbs were replaced with 17 watt Philips GreenPower LED bulbs. The energy saving was significant. As the GreenPower bulbs have regular fittings, there was no need to change anything in the lighting set-up. The bulbs were simply replaced and the installation was ready to go.

Compared with the old bulbs, the lower energy consumption of the Philips GreenPower LED lights allows better control of the day-length manipulation cycles because the lights can be switched on without having to take other lighting programs into account. The entire system can now be operational all at once without this affecting the voltage or the performance of other parts of the farm. This has resulted in an improvement in quality compared with the previous lighting/growing conditions.

'We are now consistently producing more uniform and stronger plants,' says Eddy Verbeek, General Manager of Florensis. 'Our cuttings are better and, thanks to the improved internal quality, we are enjoying higher success rates in rooting. The superior output has even been noticed by our customers, who are always looking for more uniform plants. At the same time, we have reduced our impact on the environment. In short, this is a win-win situation. Following our first successful full production season of Poinsettia at the Kenyan site, we are now investigating the possibility of using LED lighting for other crops and converting to production under Philips GreenPower LEDs.'

"Our cuttings are better and, we are enjoying **higher success rates in rooting."**

## Facts

**Horticulturalist / grower**
Florensis Kenya Ltd

**Sector**
Rooted and unrooted cuttings of bedding plants and Pelargoniums

**Crop**
Bedding plants, Pelargonium and Poinsettia

**Location**
Naivasha, Kenya

**Solution**
Philips GreenPower LED flowering lamp

**Philips LED Horti Partner**
UFO Supplies BV

**Objective**
Better plant quality and substantial energy savings



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Philips horticulture LED Solutions visit:
www.philips.com/horti

Write us an e-mail:
horti.info@philips.com

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