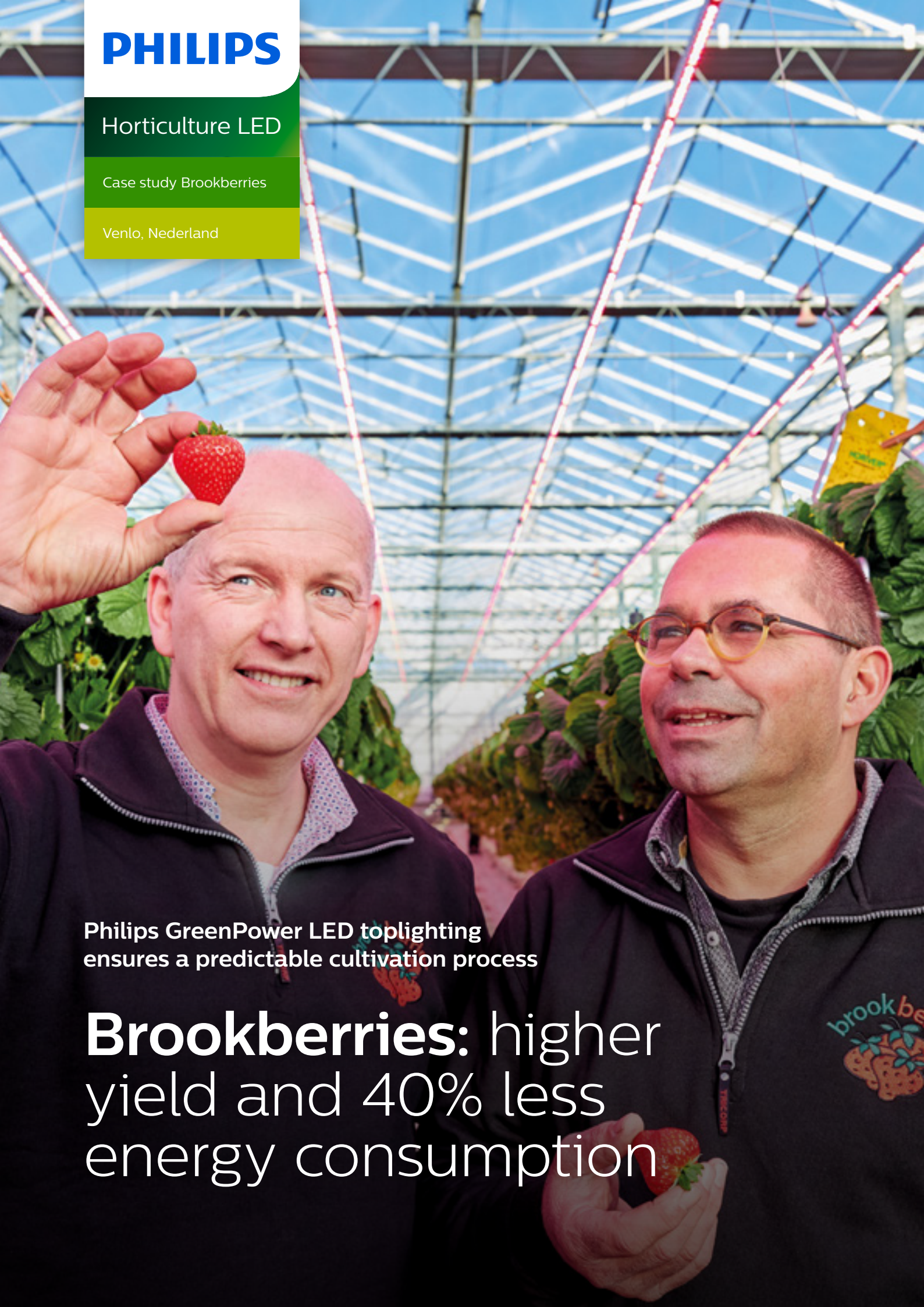
PHILIPS

Horticulture LED

Case study Brookberries

Venlo, Nederland



Philips GreenPower LED toplighting ensures a predictable cultivation process

Brookberries: higher yield and 40% less energy consumption

The Background

Brookberries is run by Marcel Dings and Peter van den Eertwegh. They have different backgrounds and complement each other perfectly in their quest for the ultimate goal: to grow the exact amount of strawberries the market demands in an economical and socially responsible way. Brookberries from the Venlo region grew into a specialist grower of strawberries in the last twenty years. Brookberries grows 2.5 million kilos of top quality Sunsation and Sonata strawberries each year, divided into four greenhouses. Two of the four greenhouses are half-lit; one with traditional HPS-lighting and the other one with Philips GreenPower LED toplighting. The other two greenhouses are not lit and are just exposed to sunlight. The company is affiliated with producer organization Fossa Eugenia, which regulates the strawberry market.

The Challenge

Brookberries sets the bar extremely high. The company wants to grow quality strawberries and produce them year-round. This will require the very best lighting, so that the production process becomes more predictable and the yield increases. Brookberries’ wish does not come out of the blue. Consumers indicate that they are prepared to pay more for a strawberry grown in the Netherlands that has a fuller and richer taste than the varieties from the Southern European or North African region. There are also economic and social reasons. The company strives for a production process that both meets the societal needs and the demand for year-round production. This is why the company has opted for Philips GreenPower LED flowering lamps, replacing the previous 150 Watt cyclic lighting incandescent lamps.

“**We consume 40% less energy and are able to control the precise amount of light and heat.** We now have much better control over the growing process.”

Peter van den Eertwegh, Director Brookberries

The Solution

Since the end of 2018, 6,700 armatures with Philips GreenPower LED toplighting have been instrumental in contributing to a constant production process and a predictable high yield. The LED lighting makes it possible to have three cultivation cycles per year, instead of two in unlit greenhouses. There is a continuous growing process, even in months with little daylight. For growers, commercial partners and the consumers, this is a very desirable development which is in line with the societal and economic needs of the year-round availability of quality strawberries.

The Advantages

Philips GreenPower LED toplighting uses up to 40% less energy than traditional HPS lighting and gives off very little radiant heat. Brookberries is completely self-sufficient. Electricity and warmth are generated through cogeneration. Because Brookberries now has optimal control over their heat consumption and is able to regulate light and heat separately, the company now enjoys the best possible ‘natural growing conditions by using Philips GreenPower LED toplighting. As a result, plants look better and the lighting contributes to nutrient production, fruit growth and taste. The new lighting also gives better control of harvest times, something that really appeals to the commercial partners. The limited maintenance was the reason Brookberries opted for Philips GreenPower LED toplighting. The fixtures have a long service life and unlike HPS lighting, they have no reflectors. This requires less cleaning.

The facts

Grower
Brookberries

Location
Venlo, the Netherlands

Sector
Fruit cultivation

Crop
Strawberries

Solution
6,700 Philips GreenPower LED toplighting modules

Philips LED Horti Partner
Codema Systems Group, Venlo

Results
- Energy savings of 40%
- Higher yield and a more predictable cultivation process
- Stronger crop, better fruit growth and improved taste

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