

## LED Research Facility to Open at Stockbridge Technology Centre

| Jennifer Zurko

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The LED 4 CROPS applied research and knowledge transfer facility for LED lighting will be operating by May following exchange of contracts between STC, CambridgeHOK and Philips Lighting. LED 4 CROPS will have mobile racks for multi-tiered crop production fitted with Philips Lighting LED lights, to enable light spectrum adjustment and flexibility, for growing a range of low level crops such as herbs, leafy salads, flowers, strawberries and plants in propagation. GreenPower Research Module lights for full spectral modification, as well as GreenPower Production Modules, will allow scientists to tackle a wide range of investigations and demonstrations. There is a similar-sized glasshouse alongside for comparison trialing.

Graham Ward, STC chief executive said, "This is the first investment made for horticultural research facilities since the withdrawal of most UK government funding for such capital projects. I am very grateful for support and commitment of the STC Research Foundation Trustees in funding this, so that scientists can work with growers to tackle issues around their future economic viability and food security/climate change challenges."

Philips Lighting will bring their knowledge of horticultural LED lighting from around the world to support the unit. Philips Lighting has many years experience with over 100 projects completed investigating the effects of LEDs on a range of crops. CambridgeHOK, the certified UK partner for Philips Lighting, are constructing and monitoring all the installation and control equipment for the LED lights. They also bring many years of experience to the design of the production equipment and structures.

Tim Haworth, their general manager said, "We at CambridgeHOK are very excited to be involved in this project as we truly believe that LEDs will become another significant tool in the growers' armory. For the first time, we have the ability to offer growers practical technical solutions that have a direct impact on plant physiology, in ways that can be monitored and measured. The joint relationship in the project of STC, Philips and CambridgeHOK shows what can be possible without massive funds from government bodies."

Dr. Martin McPherson will manage the science and Michael Langdale will be in charge of the growing operations at STC. The work in the unit will be kick-started by a Research Fellow funded by the Horticultural Fellowship Fund. The Fellow will work within a project involving Lancaster University, STC and the Farm Energy Centre. The industry will have an agronomic lighting expert, working with them from the LED 4 CROPS base, within a couple of years.

"LED technology is advancing rapidly and offers a novel solution for sustainable intensification for horticultural production, as well as the possibility of creating a step change towards 'urban farming,'" commented Dr. McPherson.

"It is the most significant advance in my lifetime in the industry," says Graham Ward. "Could you imagine being able to design spectra for individual plants and at different growth stages when you came into horticulture?" **GT**