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LED - "IT'S NOT JUST ABOUT LIGHT"



Steve Edwards
Managing Director
PhytoLux



PHYTOLUX SEMINAR
"IT'S NOT JUST
ABOUT LIGHT" 2016

Introduction

- PhytoLux is a UK company involved in plant growth technology since 2011
- Focused on developing specialist knowledge
- Developed a uniquely engineered design offering commercially viable solutions to the industry
- Working in partnership with over 60 UK clients
- Knowledge in the application and use of LED Plant Growth Lights



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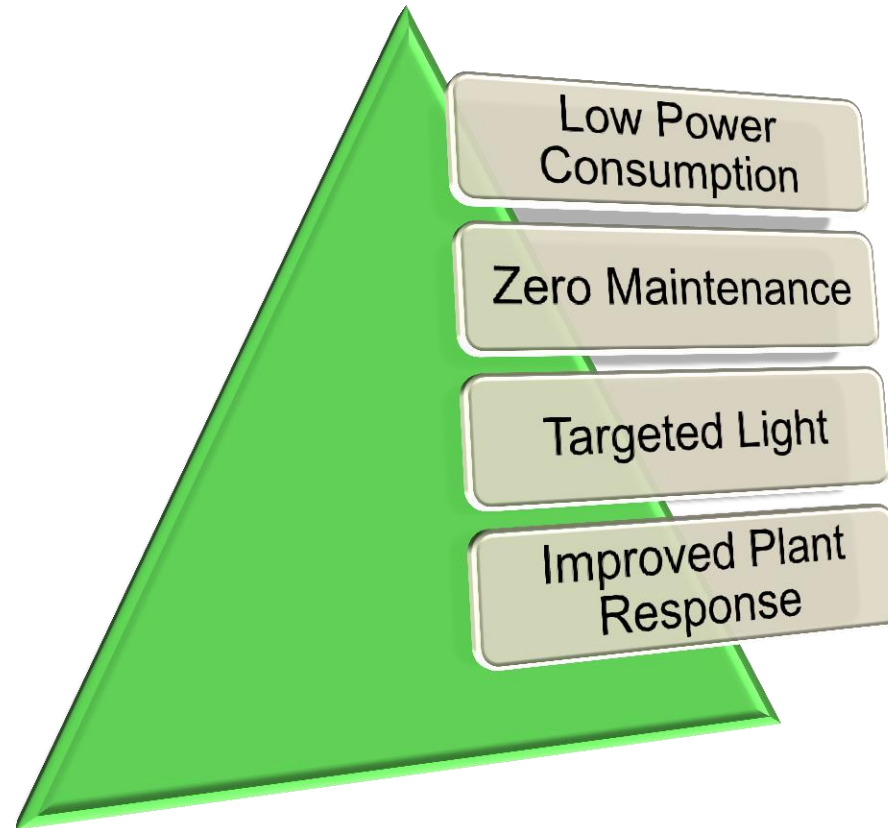
University of
BRISTOL



PhytoLux

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Technological Advantages



Market applications





Major tomato grower



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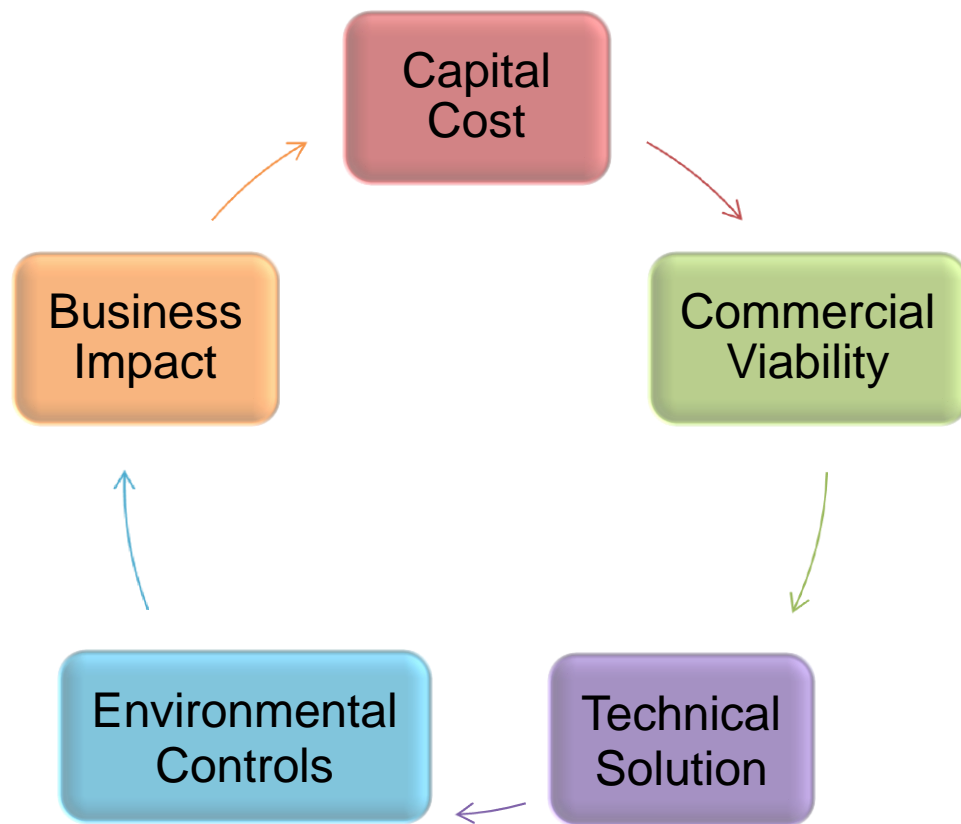


LED – It's not just about light!



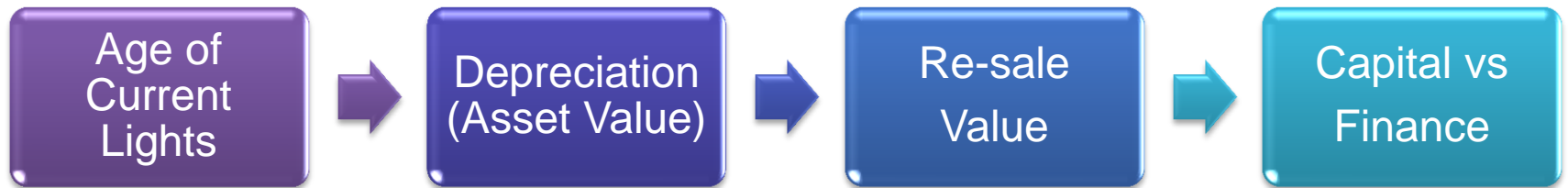
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It's not just about light



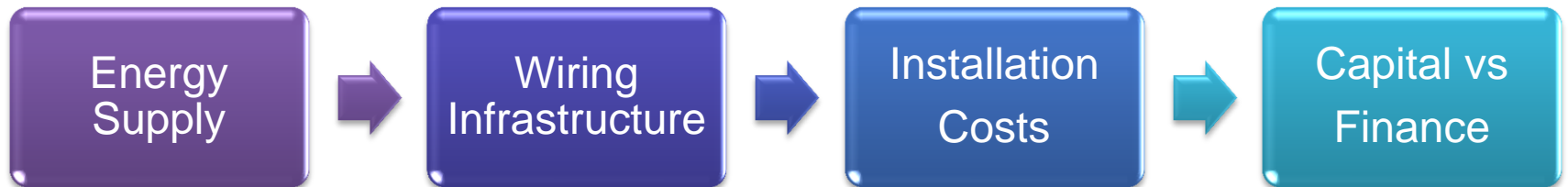
Capital cost

Currently lighting your crop



Return on Investment

Not currently lighting your crop





Major strawberry grower



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Commercial Viability

Return on Investment

Season
extension
Or
All year round
growing

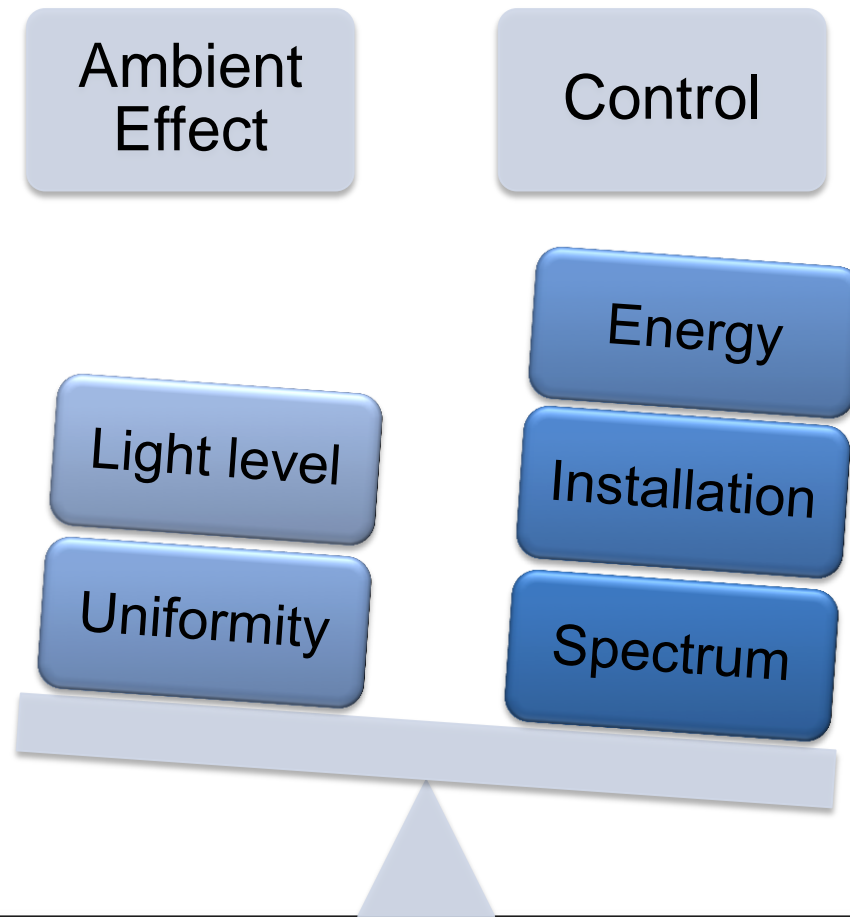
Maximum yield
regardless of
cost
Or
Optimum but
profitable yield

Operating costs
Energy costs
Maintenance
costs
Heating /
cooling costs
Staff costs

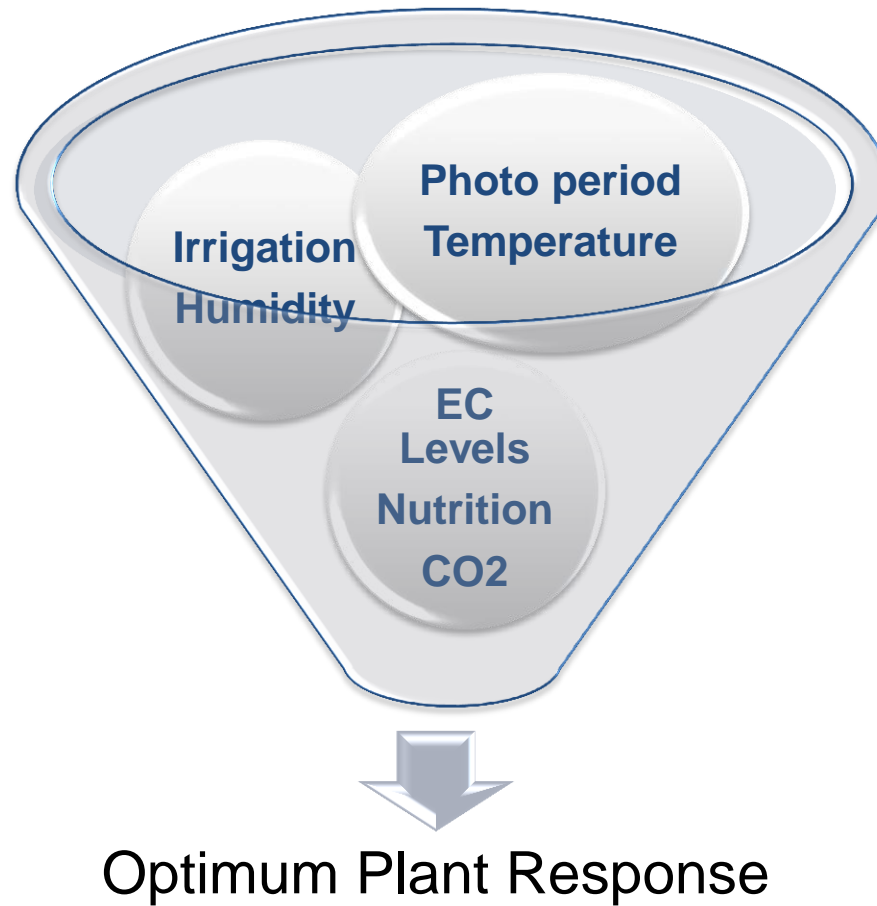


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Technical Solution



Environmental Controls





A leading UK seed and plant breeding organisation



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Irrigation interval

Example:

Cypres grass tests at Syngenta Jeallotts Hill.

Intervals used:

- Every other day
- Once per day
- Twice per day
- Three times per day



Every Other Day



Once a Day



Twice a Day

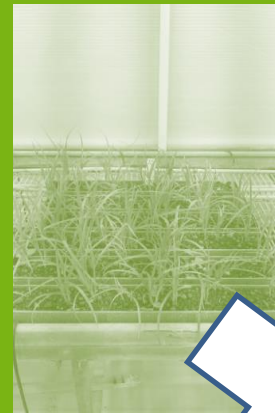


Three times a Day





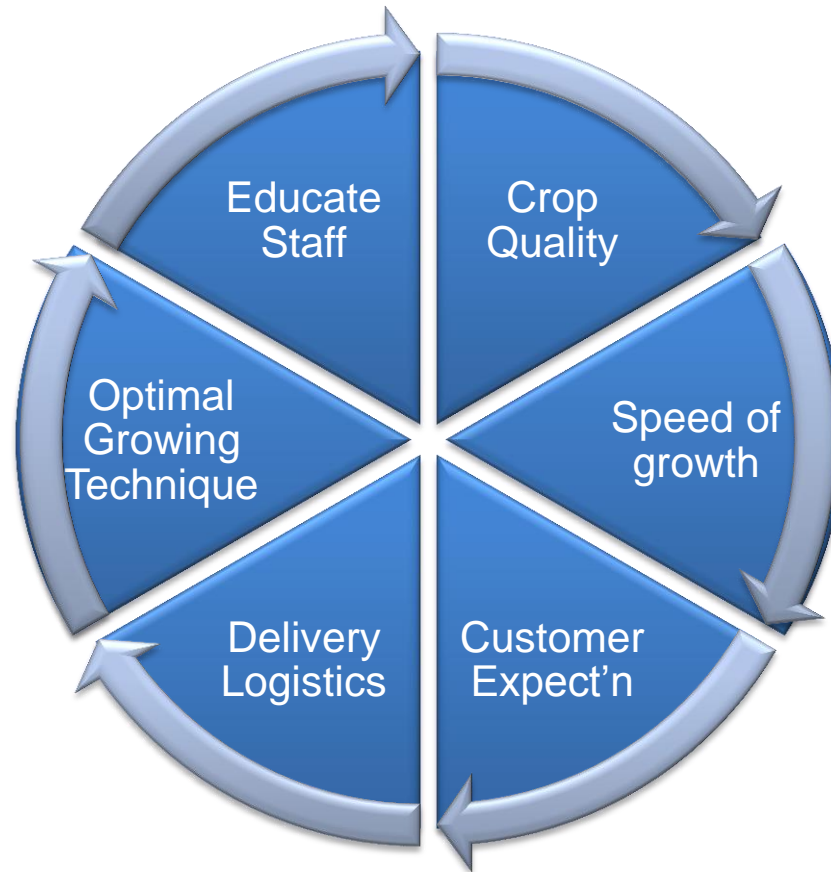
Once a Day



Twice a Day



Business Impact

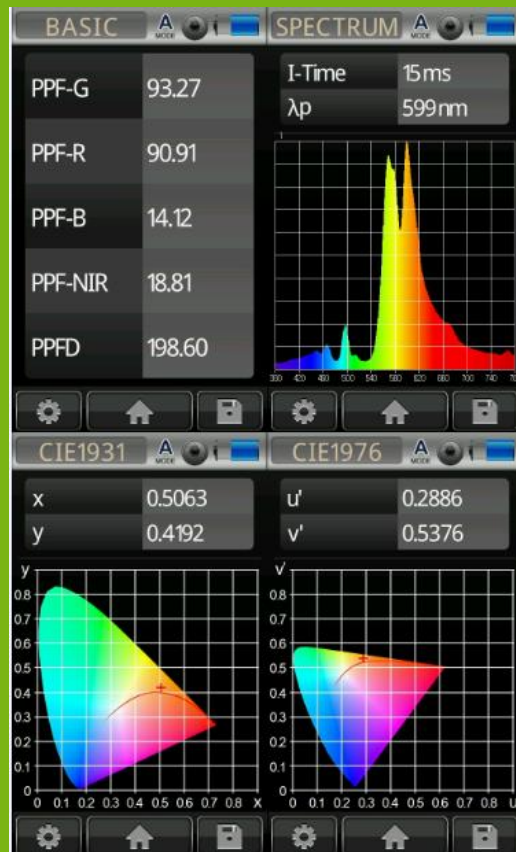




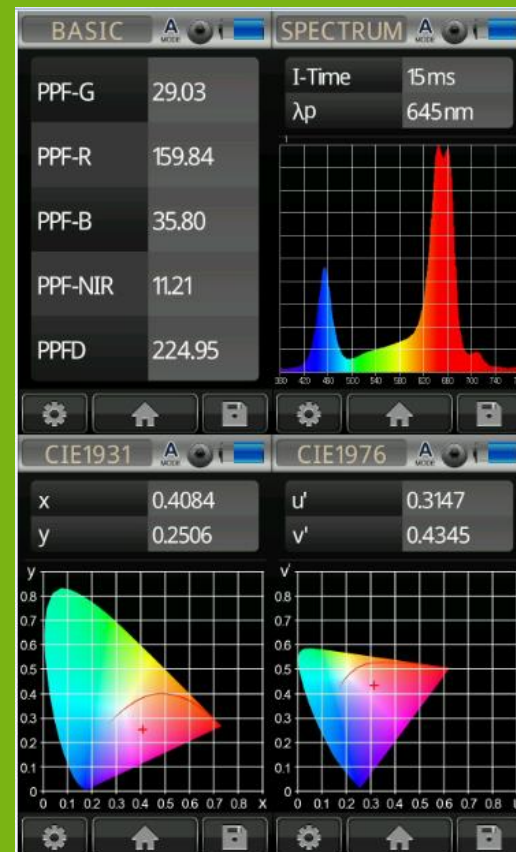
But light does matter



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600W HPS



Attis-7 HR

Major Commercial Research Trials – French Bean



600W HPS



Attis-7 HR

Wheat



600W HPS



Attis-7 HR

Turnip



600W HPS



Attis-7 HR

Oil Seed Rape



600W HPS



Attis-7 HR

Lettuce



600W HPS



Attis-7 HR