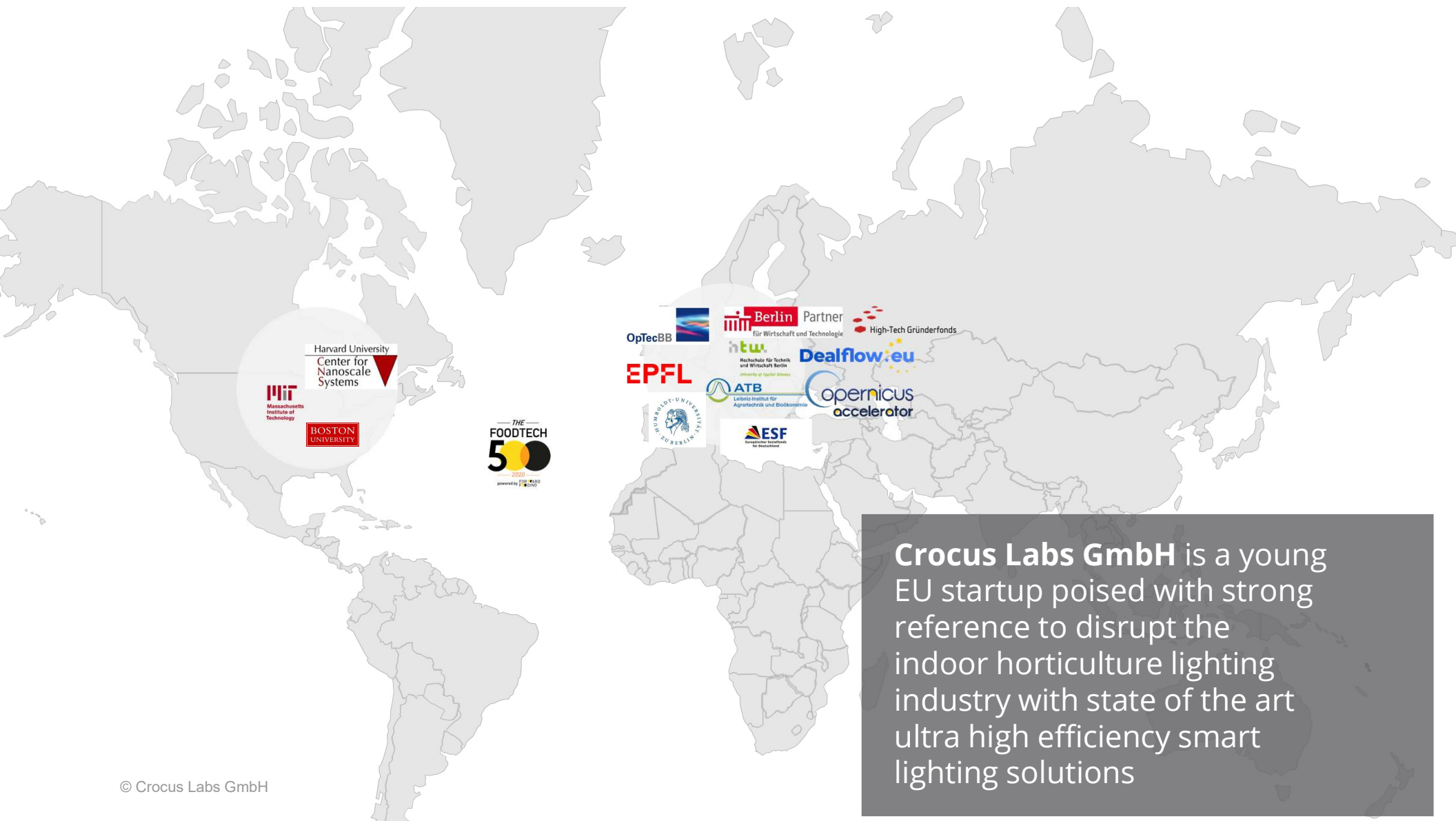




Disruptive smart horticulture lighting systems



# CORPORATE PRESENTATION 2021



Harvard University  
Center for  
Nanoscale  
Systems

MIT  
Massachusetts  
Institute of  
Technology

BOSTON  
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OpTecBB

Berlin Partner  
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EPFL

htw  
Hochschule für Technik  
und Wirtschaft Berlin  
University of Applied Sciences

Dealflow.eu

ATB  
Leibniz Institut für  
Agrotechnik und Bioökonomie

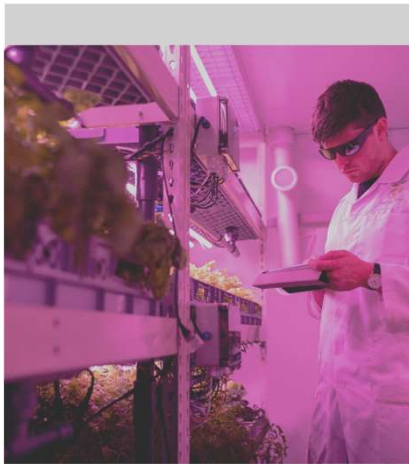
Copernicus  
accelerator

ESF  
Europäischer Sozialfonds  
für Wachstum

**Crocus Labs GmbH** is a young EU startup poised with strong reference to disrupt the indoor horticulture lighting industry with state of the art ultra high efficiency smart lighting solutions

# Crocus Labs in a nutshell

Ultra high efficiency smart lighting solution provider, tailored to specific horticulture needs



## Research

Flexible & tunable lighting system to aid cutting-edge research



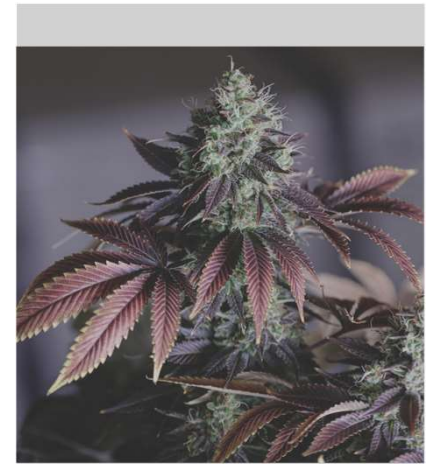
## Vertical Farms

Customized solutions tailored to technology & crop variety



## Greenhouses

Smart comprehensive solution to reduce OPEX



## Cannabis

Highest efficiency luminaires that maximizes yield

# Indoor Farming Revolution

The indoor farming industry is on the verge of a revolution and will achieve massive growth in the coming years

**\$300B** Worth of vegetables produced in greenhouse year around

**\$100B** Market expected from legalization of Cannabis

**\$1.2B** Vertical farm's first IPO is a Unicorn

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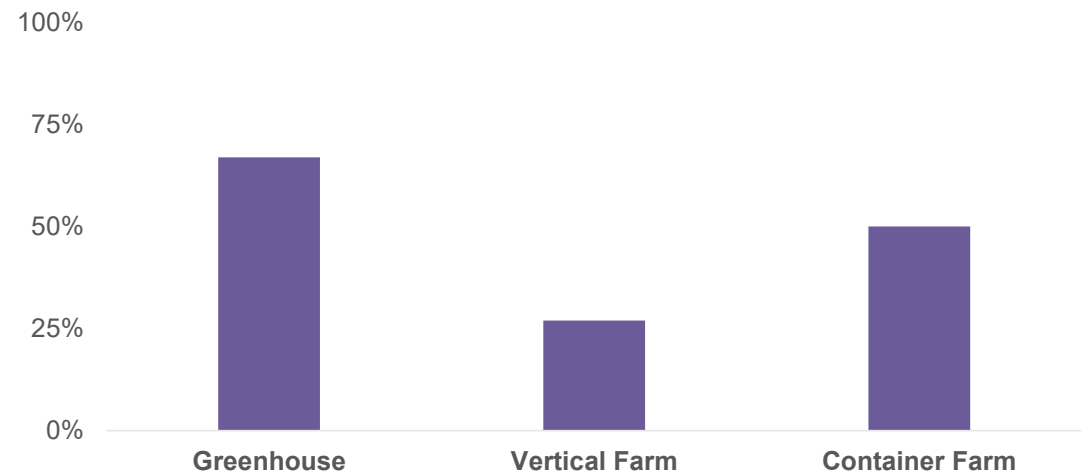
**57 %** of the produce grown in indoor farms under artificial light are inexpensive and low profitable leafy greens



## The Problem

Compared to other forms of indoor farming, vertical farms are disproportionately much less profitable because they rely completely on artificial light

Percentage of farms that are profitable



- Indoor farms rely heavily on artificial lighting, that amounts to ~25% - 35% of OPEX
- Up to 80% for some vertical farms

# Our Solution

Smart lighting system (Novel LED + Sensors + AI/ML)



## OPEX Reduction

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Low electricity consumption  
Our Proprietary LEDs can provide 40-50% higher efficiency compared to available solutions



## Turnkey Solution

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Our customers get access to a turnkey solution comprising of LED luminaires, sensor system and data analytics



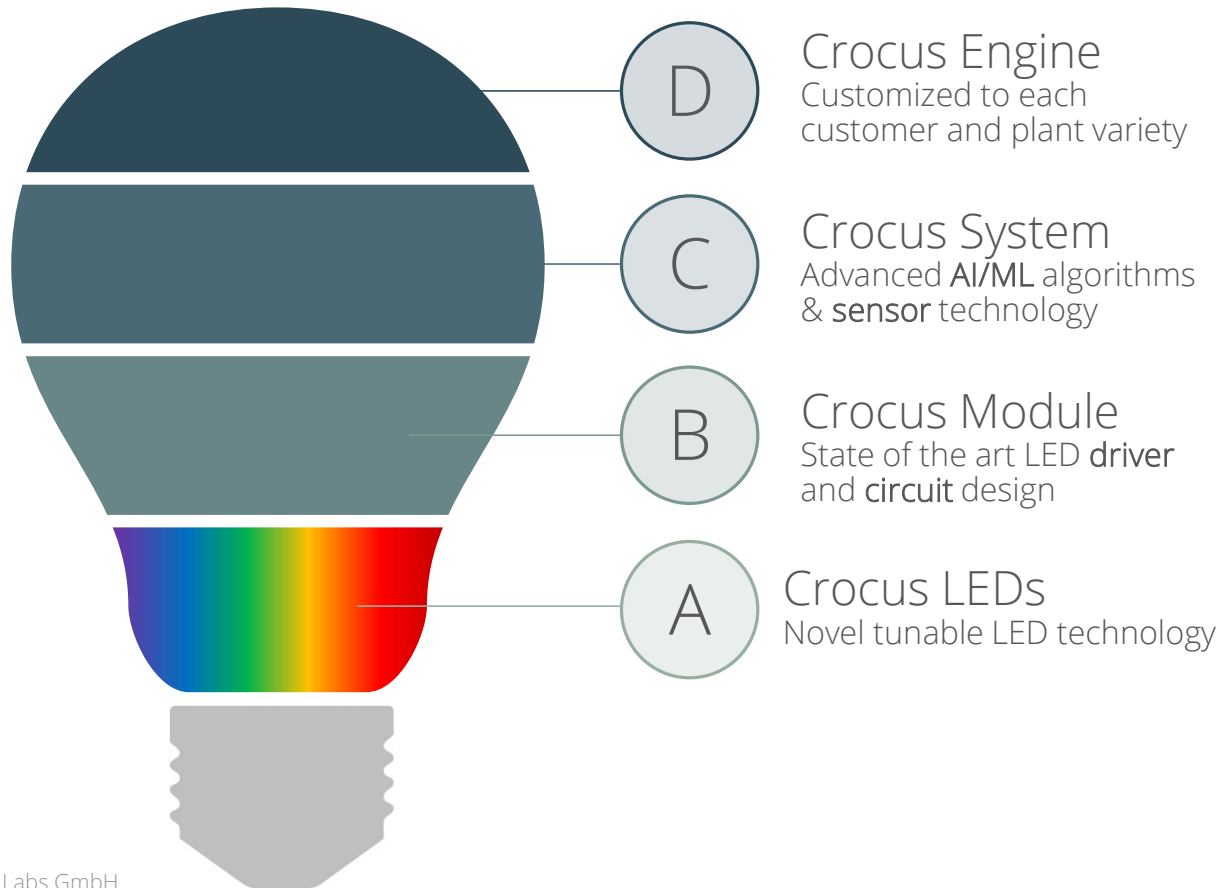
## Wider Crop Variety

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Customers can choose from a variety of crops to grow and are not restricted to certain leafy greens (e.g. mint, lettuces)

# Our Differentiator

We have shown state of the art performance at various levels and grown a wide variety of crops



Pepper



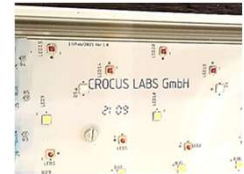
Lettuce



Stevia



Chilies



## Work with us

Help us to fast track our development

- **Direct investment** for product R&D and IP development on LED and LED luminaire to bring the product to commercial readiness.
- **Contract Research** (e.g. growth of specific crops)
- **Sensor manufacturers and Foundry Service Providers**
- **Custom Development** (e.g. customized LED modules)
- **Joint development project** (e.g. crop specific luminaire development)







Thank you.

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