



# GrowLights

Grow smart. Grow more.

GrowLights is a technology partner that solves high electricity consumption, high manpower costs, and low crop yield for current indoor farms by providing an AI-driven energy-efficient LED lighting solution.

## Problem

68 Interviews done

- High Price of LED Lighting
- High Electricity Consumption
- High Manpower Costs
- Enterprise Singapore** Lighting & Electricity expenses make indoor farms NON-profitable
- green loop farms** "Your pockets will eventually run dry if you don't produce enough."
- ARIANTECH** "AI and autonomous applications could change the destiny of indoor farming."

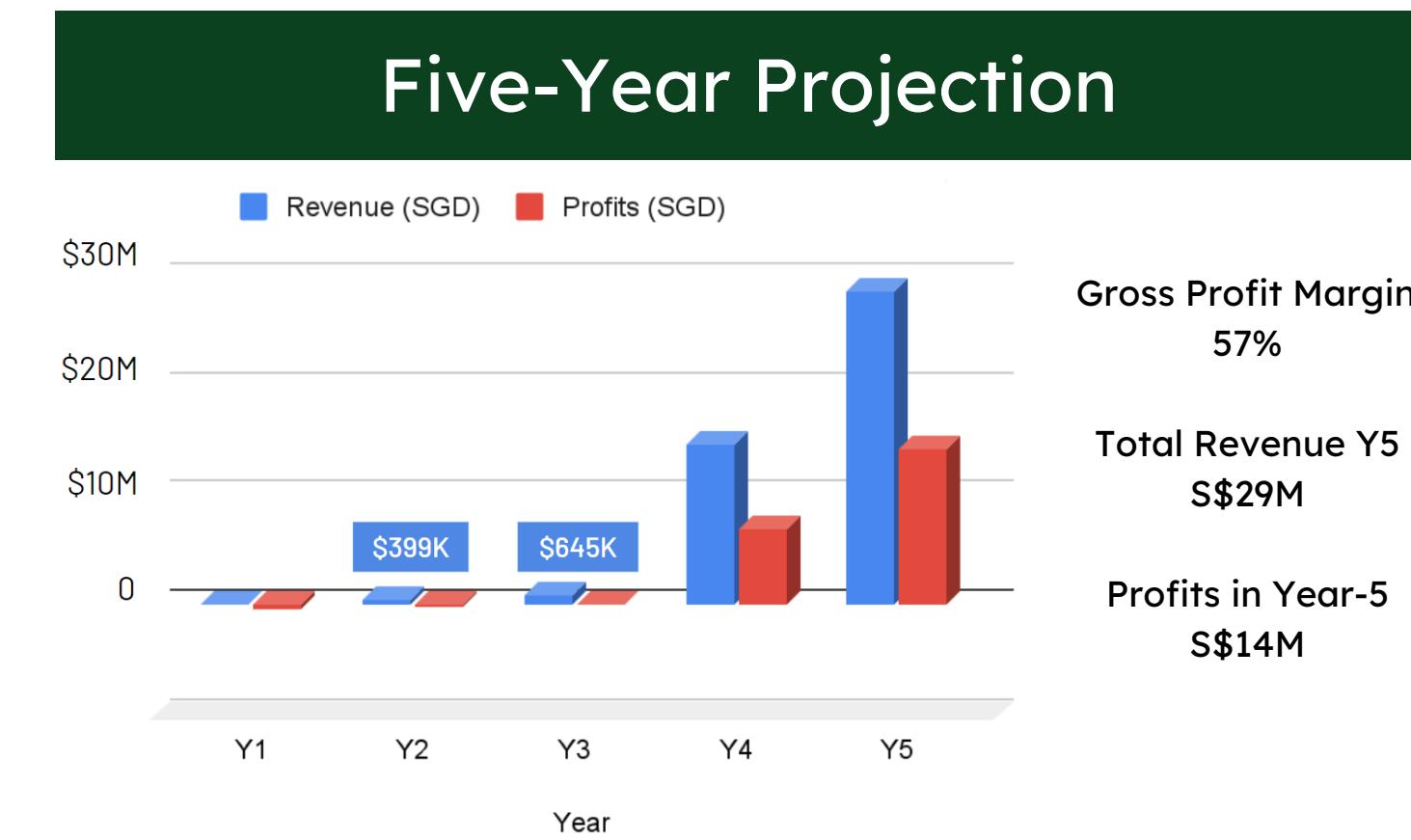
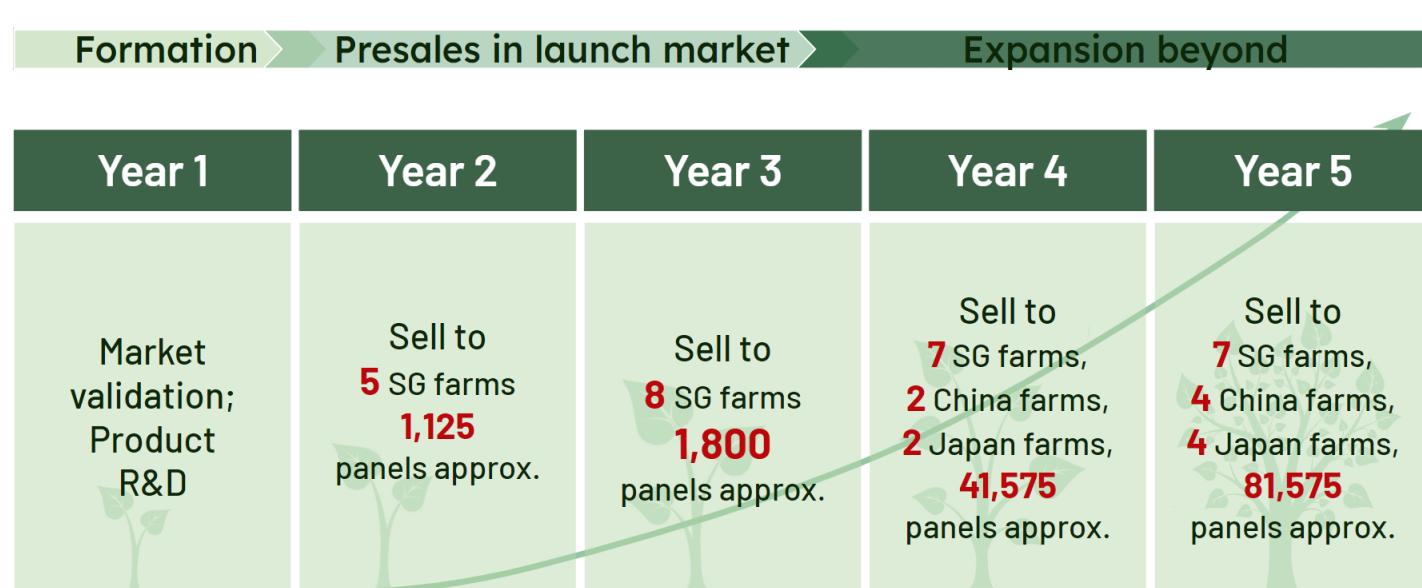
**Need to Reduce Costs**  
**Need to Maximize Yield**

## Competitors

Brands	Price*	Power Consumption	Adjustable Range	Automation
<b>GrowLights</b>	<b>SGD 350</b>	< 5W	High	Yes
<b>ARIANTECH</b> Build your dream farm	SGD 1691	32W	Medium	No
<b>Eco-Light</b> EFFICIENT • INNOVATIVE • SUSTAINABLE	SGD 363	12W	Low	No
<b>PHILIPS</b>	SGD 543.78	70-79W	High	No
<b>OSRAM</b>	SGD 526	650W	High	No
<b>Horticulture Lighting Group</b>	SGD 416	40-240W	High	No

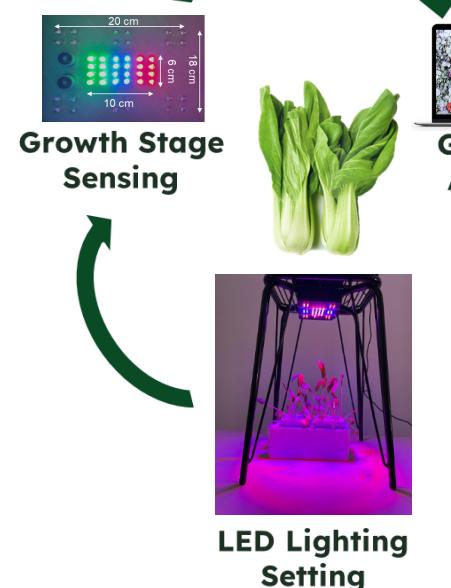
\*Price is calculated based on number of panels to achieve the same PPFD

## Go to Market

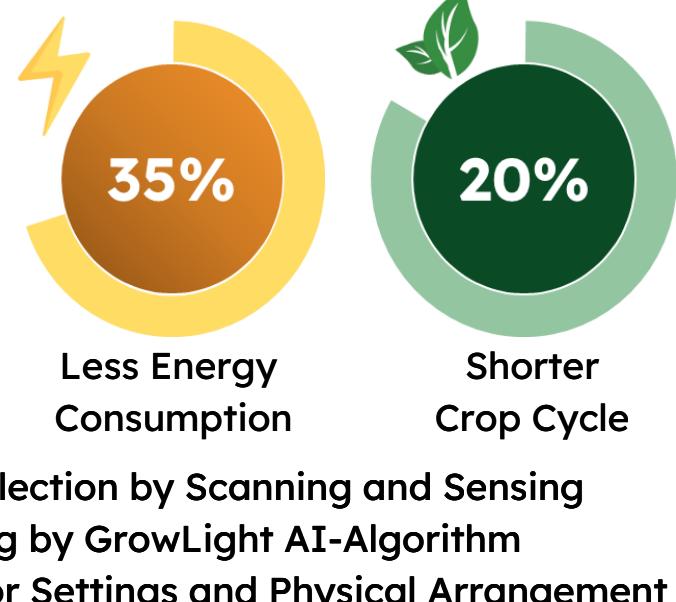


## Product & Solution

### Grow Smart



### Grow More



## Market Size



Global CAGR 25.5 %

Revenue Forecast \$ 9.66 Bn

APAC CAGR 33.4 %

Singapore Revenue Forecast \$ 1.5Bn

\$ 9.5 M

Data taken from Frost&Sullivan

## Business Model



### Direct Unit Sales

SGD 350

AFTER SALES



### Software Subscription

- AI-optimisation software
- Customized reports

Small farms: S\$ 99/month  
Large farms: S\$ 499/month



## Team & Advisors



**Co-founders**  
Khoo Eng Huat  
CTO



Andrei Kulish,  
CEO



**Business Advisor**  
Paul Singh Gill



Roger Cheong

Student Choice Award - First place for 5 weeks in a row			
Chen Xiayi MSc Built Environment	M. Furkan Ilaslan PhD Electrical & Computer Engineering	Marisa Lim MSc Management of Technology and Innovation	
Molin Cao MSc Materials Science Engineering	Lan Yingchao MSc Materials Science Engineering	Liu Zhepei BEng Industrial Systems Engineering	
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