



# Vertical Farming – Beyond Farming!

January 2022

Sprout AI  
Beyond Farming

# The Value Add of Vertical Farming

Vertical farming provides a solution to many factors affecting the current and future food supply chain

Historically, power consumption has made indoor farming uneconomic, but recent technological developments such as LED lighting have improved the economic value proposition

1) Columbia University Earth Institute. "How Sustainable Is Vertical Farming? Students Try to Answer the Question"

2) Fortune Business Insights. "Organic Foods Market Size, Share & Industry Analysis, By Raw Material/Commodity (Fruits and Vegetables, Cereals and Grains, Others), By End-use (Bakery & Confectionery, Ready-to-eat food products, Breakfast Cereals, Processing Industry, Others), By Distribution Channel (Direct Market, Processing Industry) and Regional Forecast 2019-2026"

3) Plant Factory: An Indoor Vertical Farming System for Efficient Quality Food Production. Toyoki Kozai, Genhua Niu and Michiko Takagaki.

4) The World Bank



## Local Availability

Achieve consistent, year-round local supply of indigenous and non-indigenous produce that is agnostic to seasons, climates, weather and geographies



## Risk Mitigation

Mitigation against natural disasters such as hail and wildfires that can wipe out entire crops, droughts and infestations that can adversely impact yields, and supply chain impacts such as Covid-19



## Meeting Organic Preferences

Consumer preferences are evolving to more natural, organic products<sup>(2)</sup>. The controlled environment of vertical farming reduces the need for chemicals and pesticides



## Feeding a Growing Population

Up to 100x more productive than traditional methods<sup>(3)</sup>, providing a solution to feed a growing global population amid a decrease in arable land per capita<sup>(4)</sup>



## Environmentally Friendly

Up to 95% water savings<sup>(1)</sup>, significant reduction in fossil fuel required to plant, sow, fertilize and transport crops, and reduces land use and biodiversity disturbances



## Consistent Quality

Controlled, repeatable growing conditions allow for consistent quality produce that can be rapidly delivered to local markets and reduces the number of perishables from long range shipping



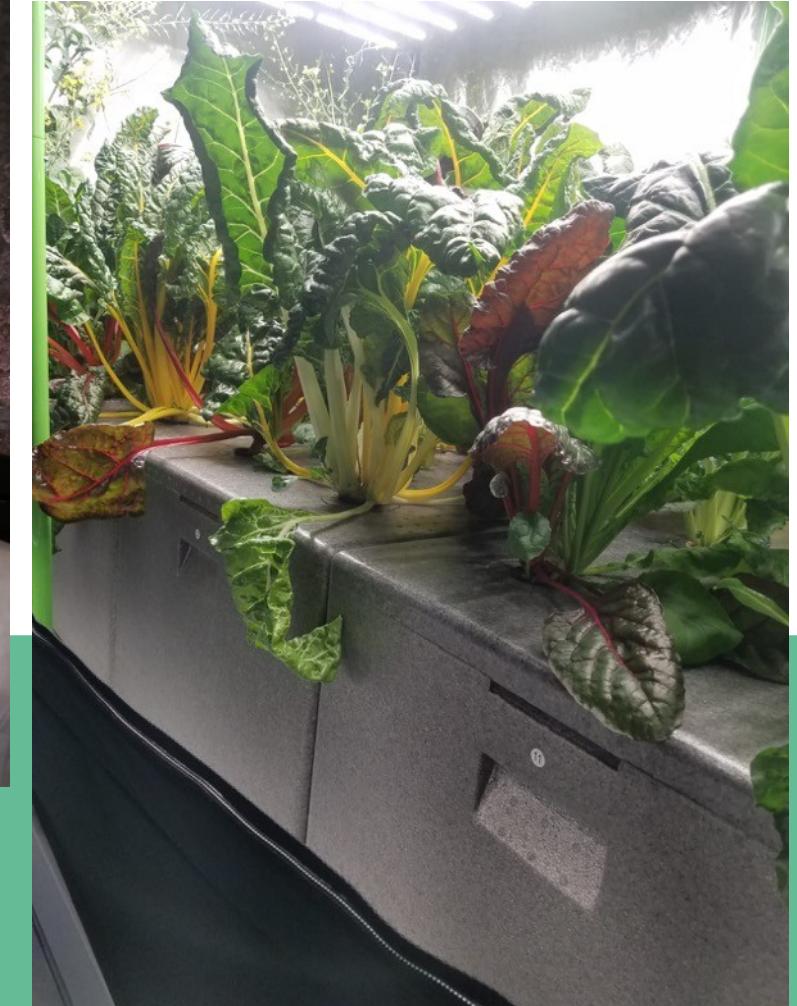
## Enhanced Food Safety

Tracking and recall of local produce serving a local market is more manageable than produce grown in international jurisdictions and shipped to a broad network of international markets



## Technical Constraints

Developing integrated systems that are designed for indoor operations including water optimization, purification and fertigation, light optimization, dehumidification, air temperature and purification, power optimization within multiple jurisdictions, remote IoT control monitoring and management.



# Welcome to Our Farms

# Beyond Farming Powered by Sprout AI

Sprout AI Inc. (“Sprout AI”) was formed to plan, design, manufacture, sell, operate and support vertical automated fogponic grow habitats designed to operate within high-density urban settings

## Vision

To continually innovate and provide the best vertical indoor farming technology that will ensure that anyone, anywhere, at any time, can reliably produce high quality, affordably priced, produce.

## Mission

Our mission is to continue to grow the most innovative vertical indoor cultivation company to ensure that every human can reliably have access to high quality, affordably priced produce, and in a way that directly benefits their local community by the year 2050.



# Scalable Habitats

The habitats are movable and modular, resulting in significant reductions in set-up time and capital cost  
Can be scaled like building blocks and can easily expand or shrink to meet local demand

**1 Habitat**



**1 Row**



**1 Rack**



**1 Stack**



## Sizing

One habitat is a 10' x 5' x 6' high unit, one row is 5 habitats, one rack is 15 habitats, and one stack is 75 habitats



## Rolling Racks

Reduces fixed aisle space, allowing for a substantial increase to the cubic cultivation area

# Habitats Can Be Installed Nearly Anywhere



Can be set up in any structure around the world that meets, or can meet, food grade requirements, mitigating the need for a special building to be constructed, and can take advantage of virtually any vacant indoor space

## Reduced Capex

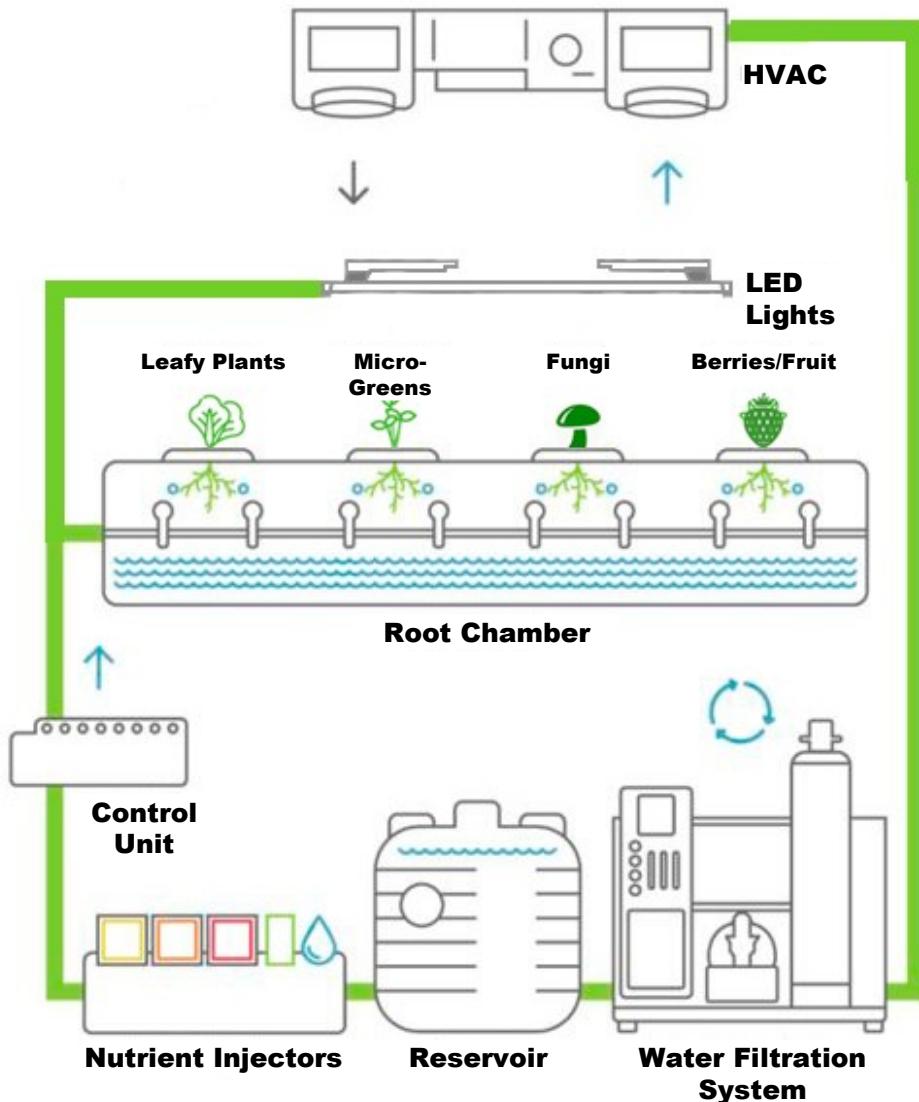
The self-contained design of Sprout AI shifts the burden of HVAC, air filtration and lighting to the habitat itself, significantly reducing capital expenditures, the risk of stranded assets, and project commencement cycle time. There is no need to retrofit a building, or build a new structure, to accommodate the increased load of a vertical farm

## Improved Air Quality

Indoor hydroponic vertical farms, such as “vertical walls” or walls-of-green”, that are not self-contained, risk high indoor humidity levels, condensation and the risk of total crop failure due to contamination

## Efficient Space Usage

Container farms (in existing sea cans as an example) are typically narrow and require an aisle which limits the cultivation area. Some container farms use custom made mechanical racks to maximize the cultivation area, but this adds to the capital cost



# The Habitat Powered By Sprout AI

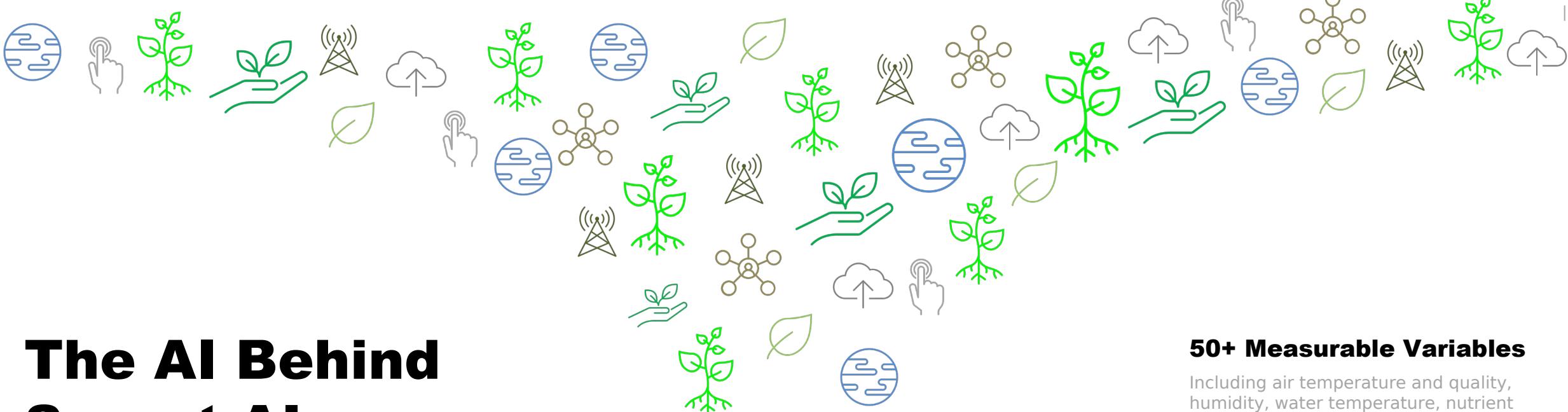
Sprout AI's cultivation technology is contained within a sealed "habitat" that includes LED lighting to minimize power consumption, advanced air filtration and HVAC, as well as a water recycle system recovering 100%

Each habitat is self-contained allowing for staggered growth plans, which results in greater labour efficiency

The separate habitats also mitigate external and cross-contamination risk and allow for multi-crop farms

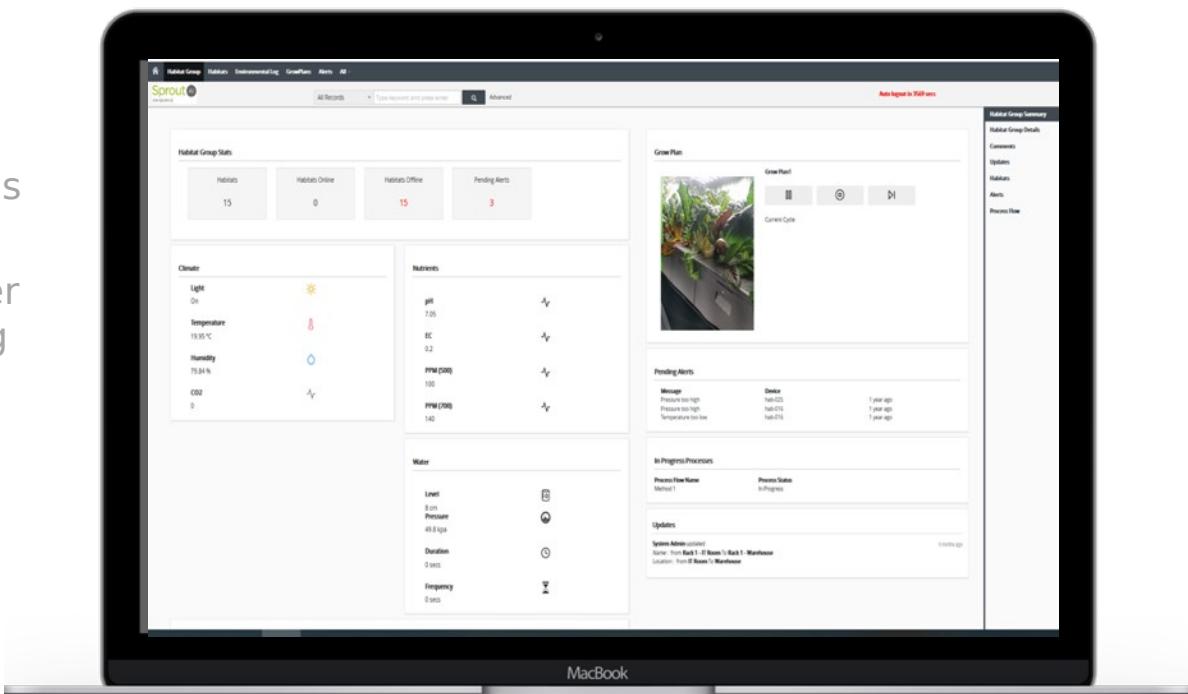
## Fogponic Driven

Sprout AI uses fogponics whereby the root is suspended in the air and fogged with purified, nutrient-rich water. Fogponics uses the least amount of water (vs aquaponic, hydro and aeroponic), has the lowest risk of plant contamination, and provides the roots of the plant with the most optimal way to absorb nutrients



# The AI Behind Sprout AI

Sprout AI's module learns over time to optimize grow conditions. Significant data collection from habitats across the world further intensifies the machine learning capabilities.



## 50+ Measurable Variables

Including air temperature and quality, humidity, water temperature, nutrient level and quality, light duration and intensity, and CO<sub>2</sub> duration and intensity

## Repeatable Grow Plans

Optimized "grow plans", can be replicated in other habitats, even if that habitat is on the other side of the world

## Proven ERP System OS2

Uses TheraCann's One System One Solution (OS2) enterprise resource planning and compliance software providing for a food grade and EU GMP compliant indoor vertical farming solution, and already approved for use in 7 countries for GMP compliance

# Development History

Sprout AI has been in development since November 2018

During this period, multiple crops were grown from seed or cutting though to final harvest, not a single crop was lost, and all crops were grown without the use of pesticides

**Founded**  
Incorporated in November 2018 and commenced operations in Panama

2018

2019

2020

2021

2022

## Initial Habitats Assembled and Commencement of Testing

Completed assembly of the initial 15 cultivation habitats (5 habitats per row x 3 rows high) completed

## Initial Testing and Improvement Cycle Complete and Covid-19 Facility Closure

Multiple crop cycles to enhance the aeroponic, air, fertigation and lighting systems, as well as the AI module to automate day-to-day operations, were completed prior to Covid-19 shutdown in Panama

## Filing TM and Patent

First round of TM and Patent Filing. Second round of Patents to be filled on or before Q4 2021

## Facility Re-Opening and Continued Improvements

Covid-19 restrictions eased and commencement of next version of habitat improvements

## Go-Public Transaction CSE

**Filing Additional TM and Patent**  
Global round of TM and Patent Filing. Patents for Fogponic Filed

## Cross List OTC QB DTC

## Receive Deposit On First Order For 140 Habitats

\$2.1M order to be delivered end of Q4 2021. Next 440 units to be delivered end of 2021 \$6.6M. Project calls for a total of 1440 habitats.

# Sprout AI Leads the Pack In Technology

## Core Objective

Provide an indoor cultivation technology that is repeatable, economic, practical, scalable, safe and secure (REP3S).



### CHAPTER 8: COMPETITIVE LANDSCAPE

#### 8.1. Introduction

Leading market players with diverse product offerings seek growth opportunities in the vertical farming market to consolidate their position. The following figure depicts the competitive strength and rankings of leading companies namely, Sprout AI Inc., AeroFarms, CubicFarms Systems, Everlight Electronics Co., Ltd, Illumitex Inc., Koninklijke Philips N.V., and Urban Crop Solutions. The parameters considered for the representation are geographical outreach, key strategies adopted, and their focus on the vertical farming offering in the market.

FIGURE 48. MARKET PLAYER POSITIONING (2020)



Global Vertical Farming Market  
Opportunity Analysis and Industry Forecast,  
2021-2030

[GO TO TOC](#)

Source: Primary and Secondary Research, AMR Analysis

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# Sprout AI Leads the Pack In ESG

## Core Objective:

Establish the highest positive impact for our industry to the UN's 17 Sustainable Development Goals (SDGs), in relation to environmental, social, and governance (ESG).

## SUSTAINABLE DEVELOPMENT GOALS



# Sprout AI Leads the Pack In Low Cost Production

## Core Objective

To ensure we maintain a distinct competitive advantage over current and future competitors in cost competitiveness.

## Special Economic Area Regime

Offering incentives to boost every company's potential, Panama Pacifico stands out by offering tax incentives, import duty exemptions and immigration solutions for companies and investors.

# Sprout AI Leads the Pack In International Locations

## Core Objective

To demonstrate that the same crops can be grown in any part of the world exactly the same way 364 days of the year.



# The Market for Vertical Farming

Evolving market conditions are making vertical farming operations more relevant in today's food supply chain

The vertical farming industry is expected to achieve significant growth

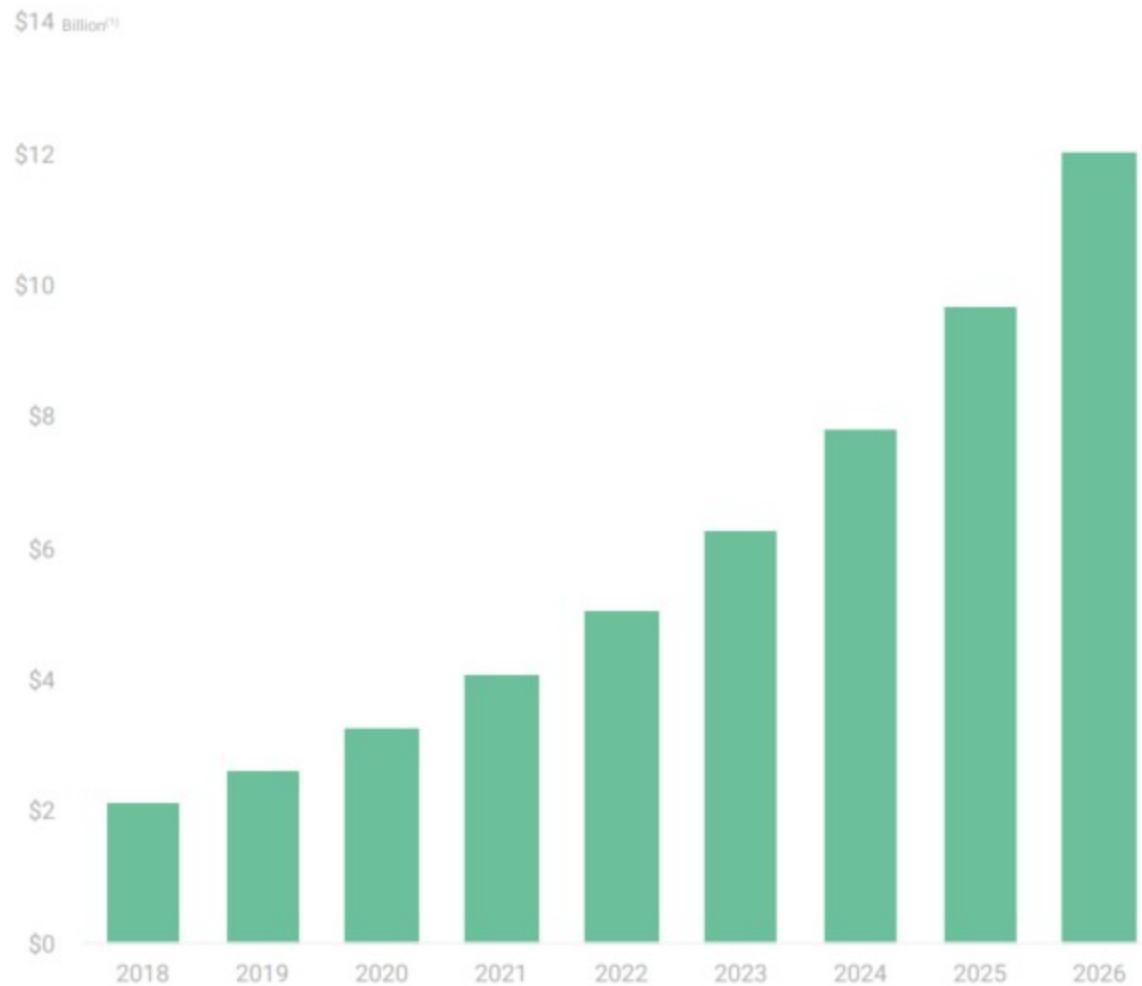
## **24.8% CAGR to a US\$12 Billion Market by 2026<sup>(2)</sup>**

The global vertical farming market size stood at US\$2.13 billion in 2018 and is projected to reach US\$12.04 billion by 2026, exhibiting a CAGR of 24.8% during the forecast period

### **Vertical Farming**

A cultivation method in which various types of products are cultivated in vertically arranged layers, in unused vertical spaces of skyscrapers, warehouses, shipping containers, and other structures

The industry can be subdivided based on growing system (hydroponic, aeroponic, fogponic and aquaponic) and structure (building vs container)



1) Graph based on Fortune Business Insights data in (2) below assuming a CAGR of 24.8%

2) Fortune Business Insights. "Vertical Farming Market Size, Share & Industry Analysis, By Type (Hydroponics, fogponics, and Aquaponics), By Structure (Building-Based, Shipping-Container), By Component (Lighting System, Irrigation and Fertigation System, Climate Control, Sensors, and Others) and Regional Forecast, 2019 - 2026."

# Current PO's

## 4 Projects – designed to house up to 1,545 Habitats

Sold at \$15,000 per Habitat

Received first PO's for 170 Habitats

Delivery in Q3/Q4 2022

Remaining Habitats to be purchased / delivered in 2022/2023

# Current Production Line

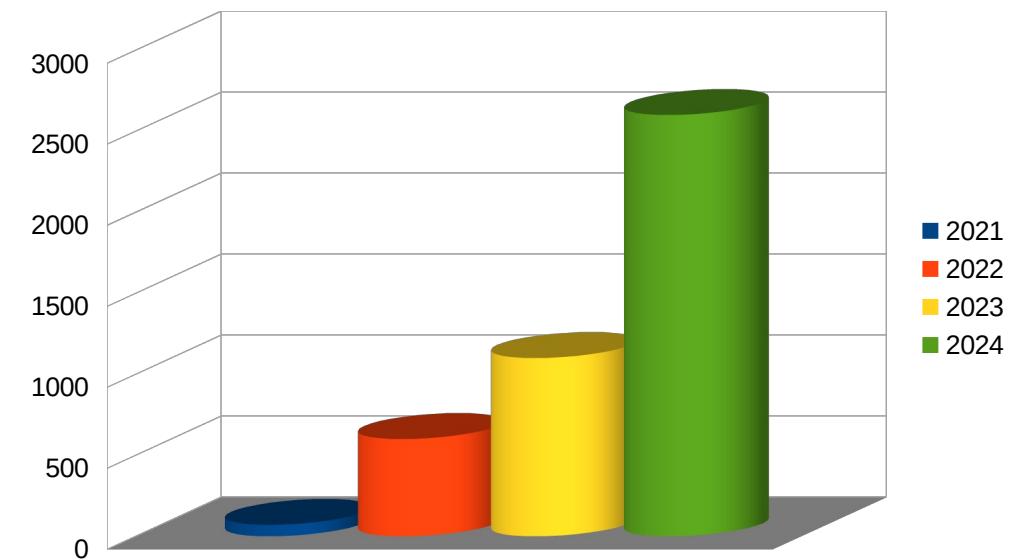
## 1,545 Habitats – 309 calendar days to produce

Currently single shift

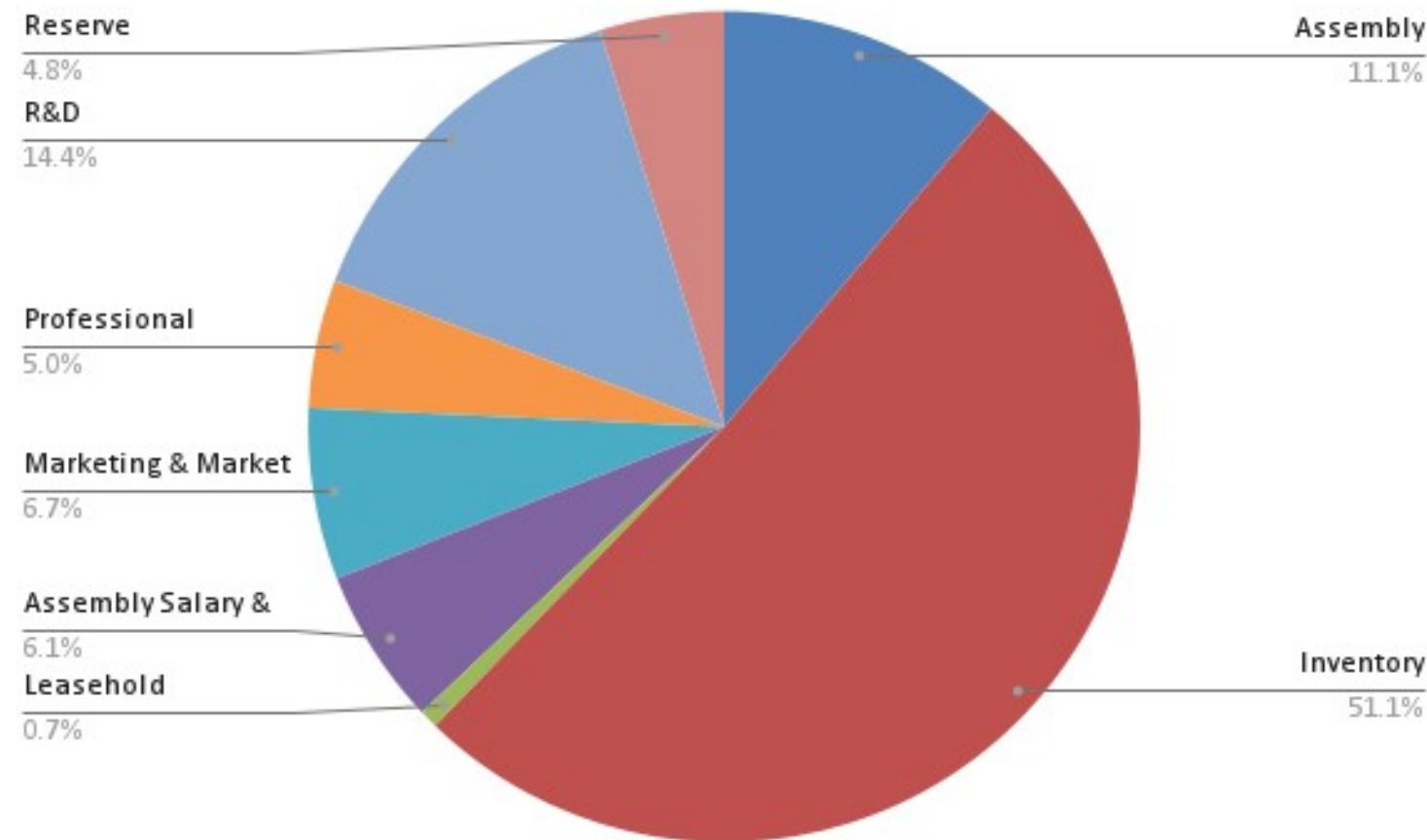
Manually assembled in Panama Pacifico

Components require 3-4 month lead-time ordering

Discounts only available for large bulk ordering



# Capital Raise: Use of Funds



# Standing Out from the Competition

Sprout AI has combined the optimum components in each vertical farming category to position it as a leader in the space



## Fogponic Grow Medium

Utilizes a fraction of the water required by hydroponic operations  
Reduced risk of water-born contamination  
Allows the root to develop faster for shorter cultivation cycles  
Larger yields from increased nutrient utilization



## Building Structure Agnostic

Habitats can be outfitted in virtually any indoor space that meets food grade requirements  
Little building retrofit required  
Sea cans/containers typically need a space to walk resulting in inefficient space utilization



## Artificial Intelligence (AI)

Data gathering of crops grown all over the world  
Consistent, repeatable crops independent of geographic climate  
Machine learning to improve growing parameters over time  
Early detection of adverse conditions  
Specialized knowledge not required by operator



## Self-Contained Habitats

No requirement to retrofit building HVAC and lighting  
Allow for multi-crop farms  
Staggered harvest  
Mitigates the risk of outside contaminates and cross-contamination



## Rolling Racks

Customized rolling rack technology  
Reduces fixed aisle space, resulting in a significant increase to the cubic cultivation area

# Leadership

Sprout AI has assembled a team of complementary skill-sets to position itself for growth across the world



## **Chris Bolton**

BA (Hons), LLB

### **CEO and Director**

Experienced with plan, design, implementation and ongoing support of complex systems

## **Albert Bangcaya**

CPA, CGA, CPA (DEL)

### **CFO**

Accounting, analysis and audit expertise gained in high tech, international operations

## **Kyle Horak**

BS

### **General Manager and Director**

Leadership and project management experience within international operations

## **Carlos Zapata**

BS

### **Manager, Manufacturing and Assembly**

Knowledge and expertise in operating complex industrial manufacturing facilities

## **Colleen McKay**

### **Investor Relations**

Advertising, communications, strategic planning, financial advisor, investment funds.

# Board of Directors

Sprout AI's Board is focused on stewarding the company's growth profile



## **Chris Bolton, CEO and Director**

Experienced with plan, design, implementation and ongoing support of complex systems



## **Tom Andrews, Director**

Professional business development globally, assisting with capital raise, managing large project teams and budgets.



## **Kyle Horak, COO and Director**

Leadership and project management experience within international operations



## **Cornerstone Gov. Corp**

Corporate governance, privacy, strategy, enterprise risk management, and compliance

# Disclaimer

**Forward Looking Statements.** Certain Information included in this presentation by Sprout AI Inc. ("Sprout AI" or the "Company") constitutes forward-looking information under applicable securities legislation. Forward-looking information typically contains statements with words such as "will", "anticipate", "believe", "expect", "plan", "intend", "estimate", "propose" or similar words suggesting future outcomes or statements regarding an outlook. Forward-looking information in this presentation includes, but is not limited to, statements relating to: the Company's ag-tech solutions, equipment and vertical farming technologies; the Company's business plan, including the intention to plan, design, manufacture, sell, operate and support vertical automated fogponic grow habitats designed to operate within high-density urban settings; the reopening of Sprout AI's facility in Panama and continued improvements thereto; key milestones; sources, availability and use of funds; estimates regarding grow capacity, yield and frequency in respect of the Company's habitats; management team and the performance thereof; partnership with TheraCann International Benchmark Corporation ("TheraCann"); and ESG initiatives.

The forward-looking statements contained in this presentation are based on certain key expectations and assumptions made by Sprout AI, including expectations and assumptions concerning: the timing of the receipt of the required regulatory approvals; the future operations of, and transactions completed by, the Company, including the availability of sufficient capital; the availability of and access to qualified personnel; the expected growth in the vertical urban farming market; the securities markets and the general economy; applicable laws not changing in a manner that is unfavorable to Sprout AI; and the application of regulatory and licensing requirements. Readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions which have been used.

Although Sprout AI believes that the expectations and assumptions on which the forward-looking statements are based are reasonable, undue reliance should not be placed on the forward-looking statements because Sprout AI can give no assurance that they will prove to be correct. Since forward-looking statements address future events and conditions, by their very nature they involve inherent risks and uncertainties. Actual results could differ materially from those currently anticipated due to a number of factors and risks. These include, but are not limited to, risks associated with the vertical urban farming industry in general; actions and initiatives of federal and local governments and changes to government policies and the execution and impact of these actions, initiatives and policies; the size of the vertical urban farming market; failure of counter-parties to perform contractual obligations; reliance on relationships with TheraCann and third party suppliers and failure to maintain strategic business relationships; intense competition from other industry participants, including from field growers, greenhouses and other vertical farmers; currently contemplated expansion and development plans may cease or otherwise change; demand for Sprout AI's products may be lower than anticipated; the ability to implement corporate strategies; the state of domestic capital markets; the ability to obtain financing; changes in general market conditions; industry conditions and events; construction delays; risks inherent in the agricultural business; and other factors more fully described from time to time in the reports and filings made by the Company with securities regulatory authorities. In addition, the Company cautions that current global uncertainty with respect to the spread of the COVID-19 virus and its effect on the broader global economy may have a significant negative effect on the Company. While the precise impact of the COVID-19 virus on the Company remains unknown, rapid spread of the COVID-19 virus may continue to have a material adverse effect on global economic activity, and continue to result in volatility and disruption to global supply chains, operations, mobility of people and the financial markets, which could continue to affect interest rates, credit ratings, credit risk, inflation, business, financial conditions, results of operations and other factors relevant to the Company.

Readers are cautioned that the assumptions used in the preparation of forward-looking information, although considered reasonable at the time of preparation, may prove to be imprecise. Sprout AI's actual results, performance or achievement could differ materially from those expressed in, or implied by, these forward-looking statements and accordingly there can be no assurance that such expectations will be realized and/or what benefits Sprout AI will derive therefrom. The forward-looking information contained in this presentation is made as of the date hereof and Sprout AI undertakes no obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, unless required by applicable securities laws. The forward looking information contained in this presentation is expressly qualified by this cautionary statement.

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**Thank You for  
Visiting Our Farms**



# Additional Information

# The Output

Sprout AI's habitats are designed to manage multiple crops and, on average, a minimum of 32 plants can be grown per habitat

## Up to 42" high versus 4 - 6" high

The habitats can grow plants up to 42" high, whereas many of the other systems available can only handle plants up to 4" or 6" high, providing the grower access to a greater selection of crop outputs



### Leafy Plants

Lettuce, spinach, chard, arugula



### Micro Greens

Oregano, basil, rosemary, chives, rocket



### Berries/Fruit

Strawberries, black berries, tomatoes



### Fungi

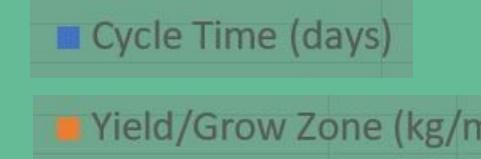
Testing underway

# Beyond Farming Advantage

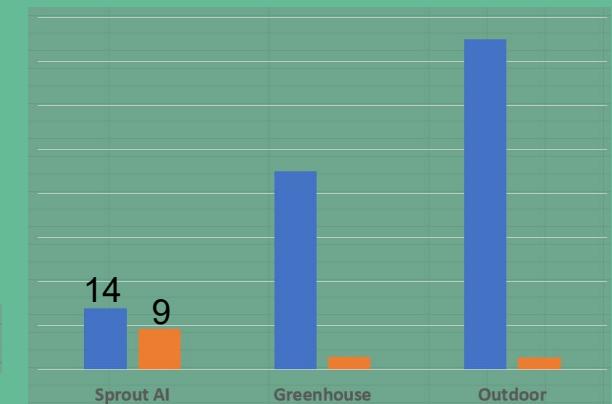
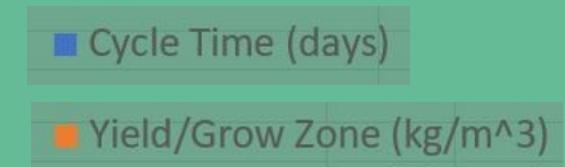
Sprout AI is able to produce higher yields  $\text{kg/m}^3$  in less cycle time.



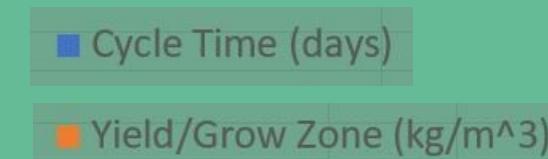
**Basil**



**Lettuce**

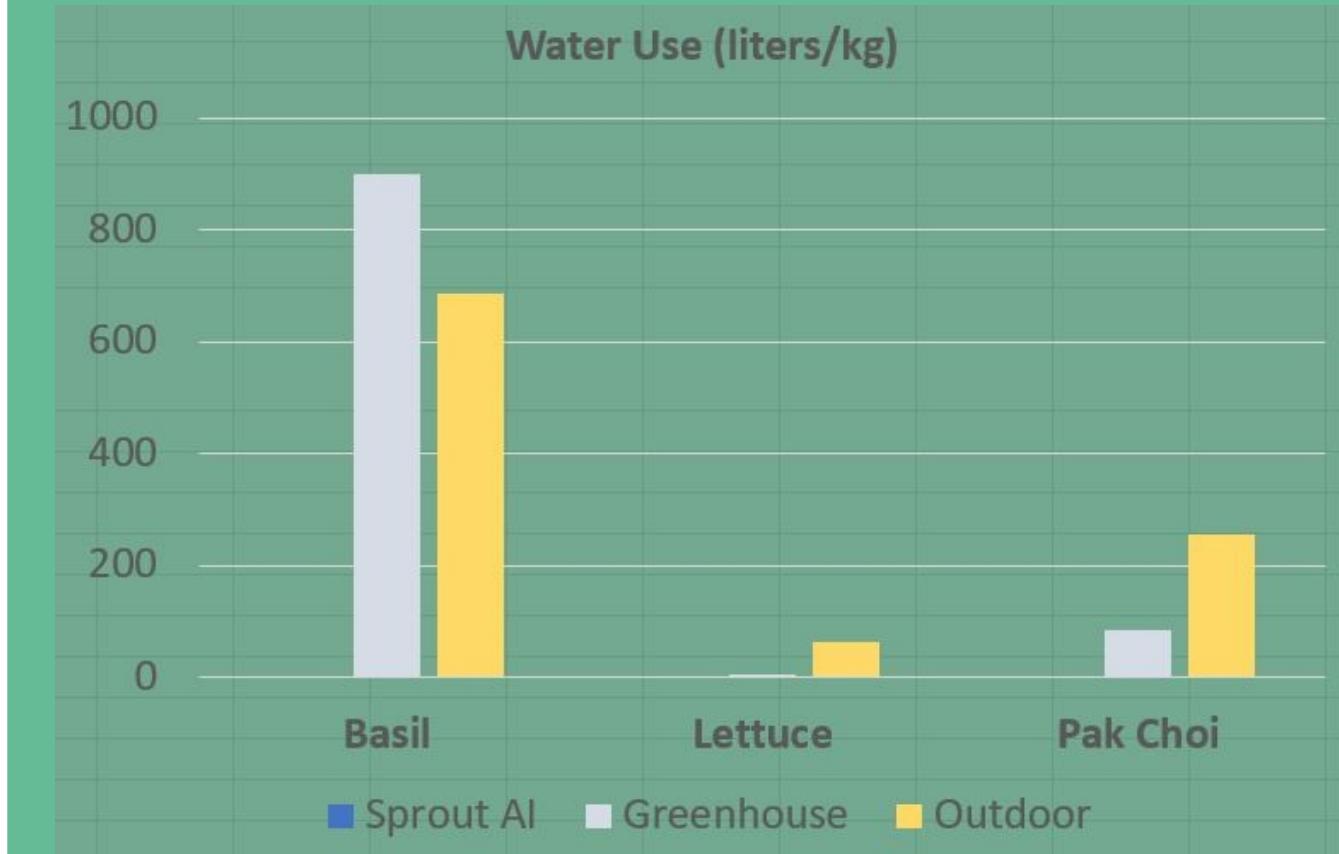


**Pak Choi**

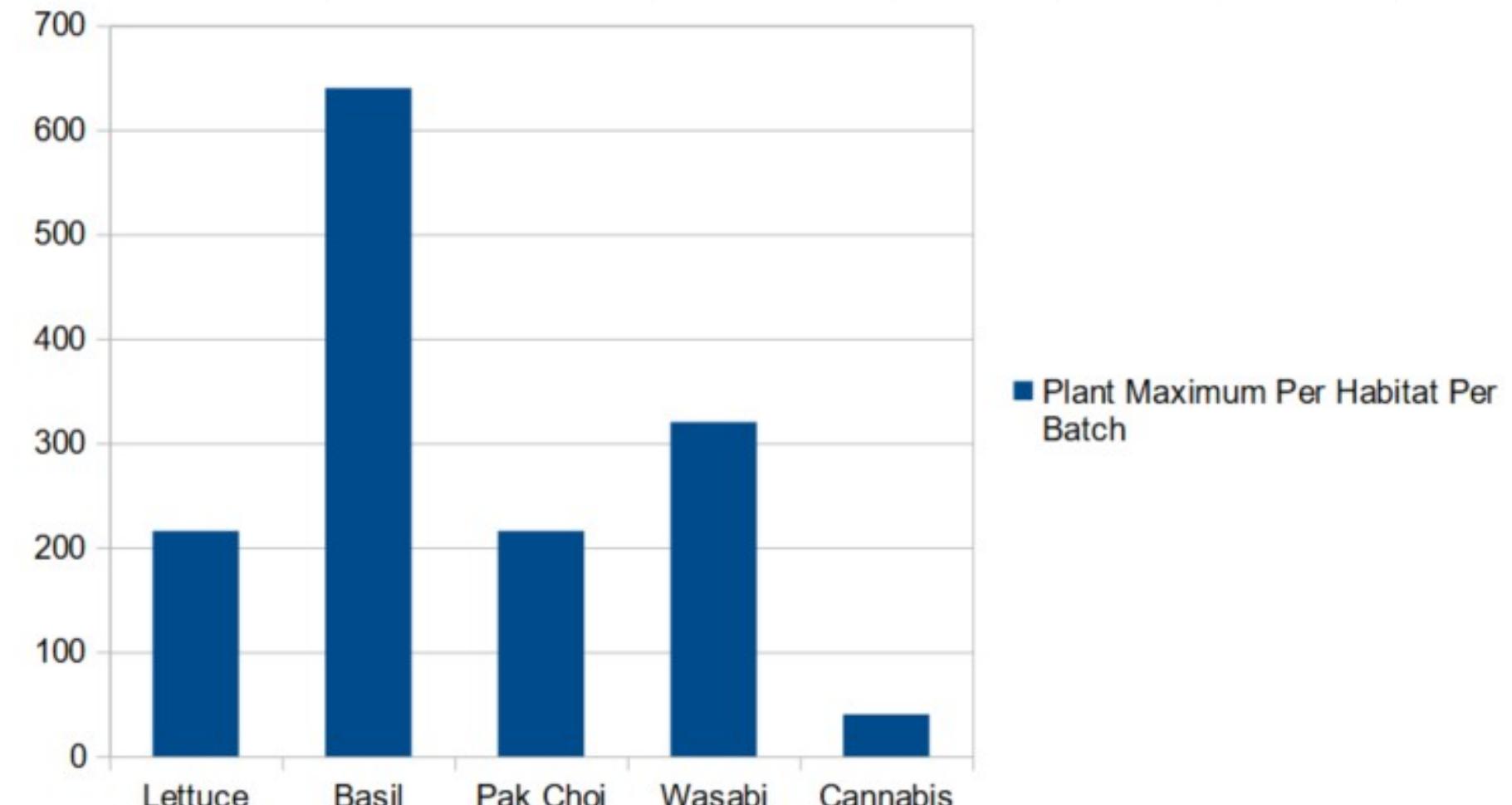


# Beyond Farming Water Use on Selected Crops

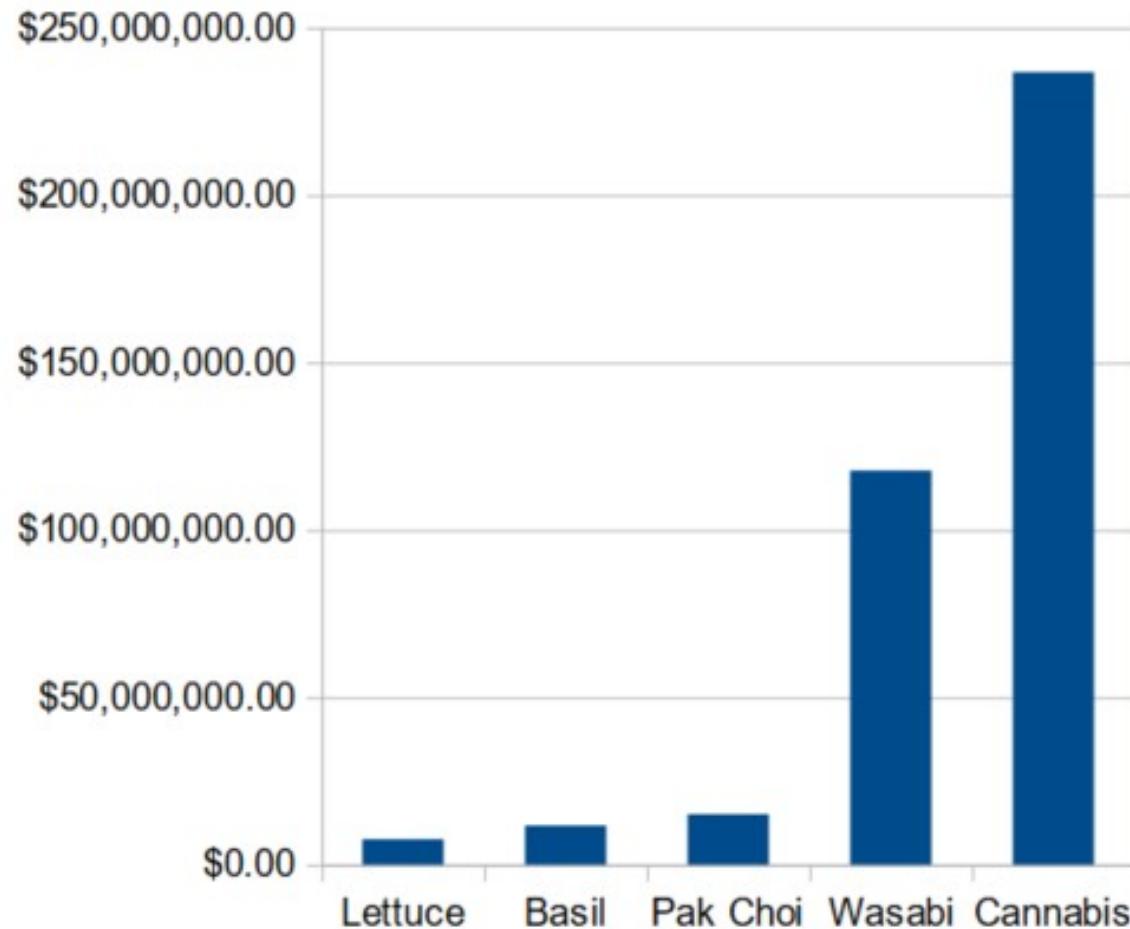
Sprout AI is water positive. Using our dehumidifying technology we are able to produce more water than we use!



# Example of Plant Densities



# Example of Plant Revenues



■ Revenue Per Habitat Per Year

54K sq. ft. / 432K cubic ft. facility

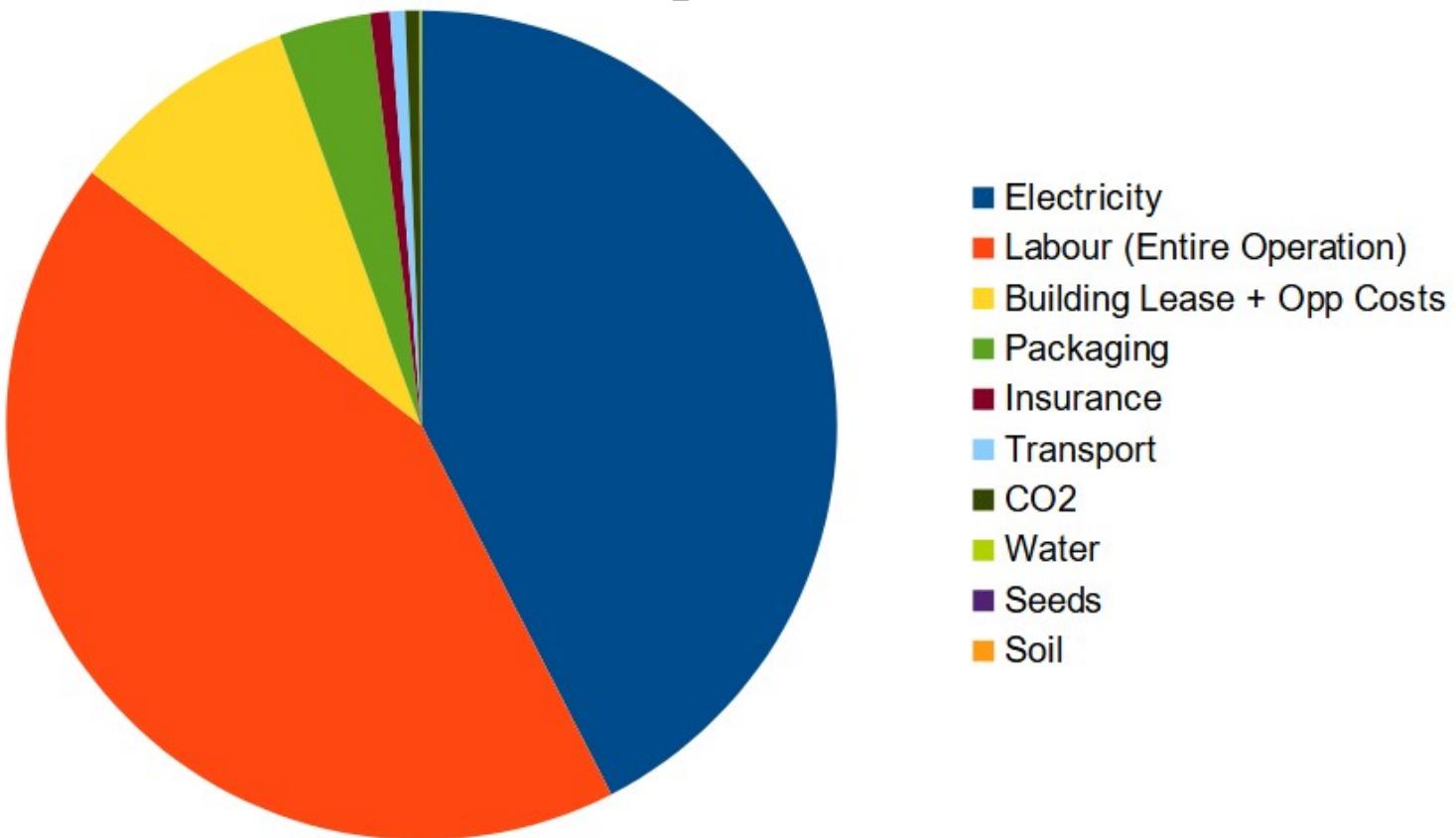
1440 habitats 24/7 operations

Lettuce / Basil / Pak Choi sold @ \$20 per lb

Wasabi sold @\$73 per lb

Cannabis converted onsite to oil distillate and/or isolate and sold @\$1,500 per lb

# Primary Operational Costs Priorities



Represents countries where Sprout AI expects to close current and additional sales in the short to mid-term period

# Sourcing Alternative Power – Our Enhanced Green Solution and Sustainability Effort

Ability to manage power switching from multiple power sources.

## A Partnership with Alternative Power Co's

Working with leaders in alternative power sources. This may provide additional greenhouse gas offset credits unavailable to traditional agriculture

### Sources of Power

Processes all types of alternative power including, but not limited to, solar, wave, wind, tidal, and geothermal.

### GHG Reductions

Green power to food is a significant contributor to meeting many of the UN sustainability goals. It obtains power in a cost effective way that provides value in the form of food security



**Providing Sprout AI's vertical farm with power, heat and clean energy**

# Creating Value From Waste – Our Enhanced Green Solution and Sustainability Effort

Conversion of waste gas into power, heat and CO<sub>2</sub> for growing food contributes to net zero

## A Partnership with Leading Tech Co's

Working with leaders in clean air technology to enable emitters to turn waste gas and heat into usable power. This may provide additional greenhouse gas offset credits unavailable to traditional agriculture

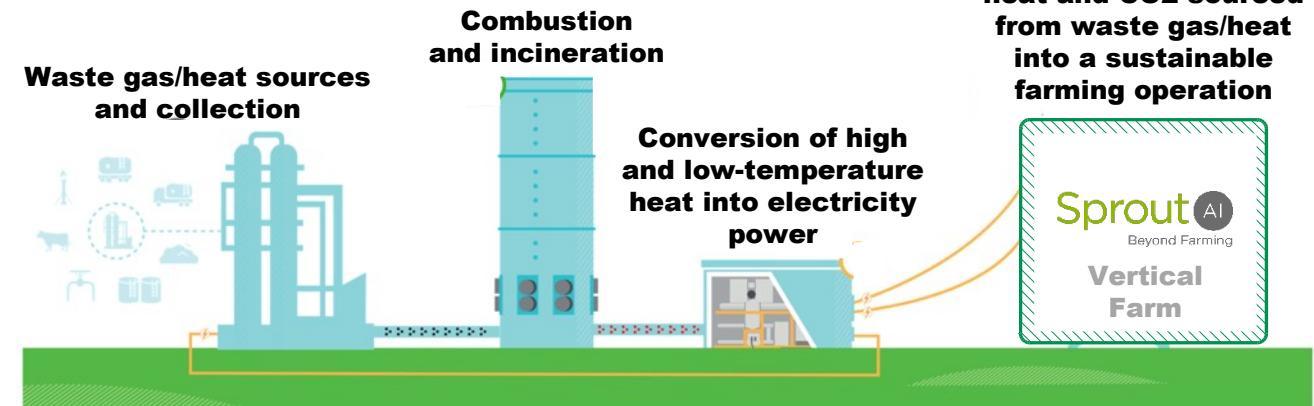
## Sources of Waste Gas and Heat

Processes all types of waste gas including agriculture, petroleum, rail car loading, mining, water, heat to power, landfill biogas, syngas, waste engine exhaust, geothermal and solar, cement plant waste heat and more

## GHG Reductions

Methane to power/heat/CO<sub>2</sub> to food is a significant reduction in GHG at less than \$2/t, and meets many of the UN sustainability goals. It sequesters CO<sub>2</sub> in a practical, useful, cost effective way that provides value in the form of food security

Use our full system or combine individual products for a customized solution that fits your operation.



**Providing Sprout AI's vertical farm with power, heat and clean CO<sub>2</sub> through the clean combustion of waste gases**

# Payment Model

## The TheraCann Relationship

Agreement to provide marketing, selling, training and support for units being delivered to TheraCann's network of clients across the globe



### As a turn-key solution

Through its reseller agreement with TheraCann who provides a complete cultivation, processing, and distribution solution, provide Sprout AI technology on a 5-year rolling order and maintenance service for fee +% of production sharing.

5 Year Managed Services Agreement that includes project plan, design, implementation and ongoing management of project.

Sprout AI sold as wholesale at US\$15,000 per unit. 40% on signing, 45% on order commencement, 15% on shipment.



### Sold as Stand Alone

Direct sale of Sprout AI Habitats, 3 Year limited warranty.

Sprout AI sold as wholesale at US\$20,000 per unit. 40% on signing, 45% on order commencement, 15% on shipment.

# Sprout

## Beyond Farming

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