Kalera | Company introduction

April 2020

KALERA

TECHNOLOGY LEADER IN URBAN VERTICAL FARMING

1 Disruptive and Perfected Technology	▪ Growing the cleanest, high quality, nutrient rich greens in a cost efficient and sustainable way near point of consumption ▪ Contamination free vegetables, no chemicals/pesticides, non-GMO ▪ Local and stable supply year around
2 Best in Class Yields	▪ *Leading yields/output per m^2 + efficient capex utilization* ▪ Advanced plant science: optimized nutrient mixes/uptake and light recipes ▪ "Semiconductor based" clean room technology, no contamination of air and water, safe produce ▪ Leading IoT, Big Data and AI - automated production controls and machine learning ▪ Growing environments: cleanest air & water, perfect temperature, humidity
3 Rapid Roll-out in US and Globally	▪ Rapid commercial roll-out and scaling initiated ▪ Orlando large scale facility recently completed on time, on budget. ▪ Ability to replicate through modularization and standardization
4 Global brand name customers	▪ Foodservice, Resort, Hospitality, Cruise Lines, Airlines, Grocery Chains, Restaurant Chains, Contract Foodservice providers (Event Venues, Hospitals, Universities)

KALERA GROWS THE CLEANEST, HIGHEST QUALITY PRODUCE IN A SUSTAINABLE WAY NEAR POINT OF CONSUMPTION

Taking quality standards to a new level

KALERA DELIVERS ABUNDANCE OF FRESH, CLEAN, DELICIOUS NUTRIENT-RICH PRODUCE, CONSISTENTLY AVAILABLE YEAR-ROUND

1 Lettuce

2 Microgreens & Other Leafy Greens/Herbs

Various types of lettuces, microgreens, and other leafy greens and herbs sold under the brands HyTaste and Kalera

HIGH SUSTAINABILITY AND RESOURCE EFFICIENCY

- **Minimal use of water** - more than 95 % reduction in water consumption (due to recirculation of water), no need for significant watering systems, drainage, etc. No sewer or landfill discharge
- **Multiples more output** than traditional methods: over 300 times more output per sq. ft. than traditional farming
- **No seasons** - 365 days a year
- **Local, fresh** - reduced transportation/storage time, reduced loss of vitamins, less inventory
- **Cleanest** produce/no pesticides, **safe**, **richer in vitamins and anti-oxidants, longer shelf life**, **less waste,**
- **Space efficient**, energy efficient production structures and equipment

Hydroponics: Method of growing plants using mineral nutrient solutions, in water without soil

KALERA COMBINES LEADING PLANT SCIENCE, CLEAN ROOM TECH AND IOT/BIG DATA/AI

Advanced Plant Science	▪ Optimized nutrition uptake and distribution *(US/int. patent application),* custom nutrient mixtures ratios for more than 150 produce varieties perfected. No additives, no hormones. ▪ Optimized air flow and grow light recipes ▪ *Advantage: growth cycle acceleration, consistent high yields, high quality produce (higher anti-oxidant and nutritive levels, taste, color, texture, and freshness)*
Cleanroom Technology	▪ Adapted from semiconductor and biomedical industries – no contamination/cleanest quality ▪ Air filtration and decontamination using plasma ionization and advanced filtration technology ▪ Advanced water purification via multi-stage filtering, Reverse Osmosis, UV and ozonation ▪ Developed methods to avoid contamination of hardware, seeds and media ▪ Perfect micro climate: optimal temperature/humidity and lighting ▪ *Food safety advantage: no pesticides, fungicides, or insecticides, and no human pathogens* ▪ *Advantage: avoid contamination and pest attack outbreaks in production*
Precision hydroponics, big data analytics and AI	▪ Advanced automation & data collection with IoT, Cloud, Big Data Analytics and AI capabilities ▪ Essential plant growing parameters are under strict control and automatically adjusted, 24/7 internet monitoring of temperature, humidity, lights, nutrients, and maintenance events ▪ Comparing to existing commercial systems that can't meet precision vertical farming needs, Kalera's system integrates large arrays of IoT sensors (vs. a just few centralized sensors), uses adaptive ion-specific nutrient dosing controls (vs. traditional controls using global measures of nutrient concentration), and is deployed via a distributed, resilient and scalable cluster-based hybrid Cloud architecture (vs. traditional centralized process control systems)

COMPETITIVE ADVANTAGES VS TRADITIONAL VERTICAL HYDROPONICS

Features	Kalera low capex/high output
Nutrients uptake and mixes	Optimized
Contamination	Low to none
Yield (kg/m^2/yr)	**Higher ++**
Crop Cycle (growth time)	Shorter
Product shelf life	Extended
Energy & Heat Management Costs	Lower
Landfill and Sewer Discharge	None
Hardware and equipment cost	**Lower ++**

KALERA'S HYDROPONICS DEPLOYMENT MODELS

Large production facility

- Produces **millions of units lettuce/herbs per year**
- Deployed in retrofitted, leased warehouses, optimal CapEx utilization and fast deployment/rapid roll-out
- Production, germination, harvesting and cold storage
- High level of automation, high-density rack system and robotics/automation for pre- and post-harvest ops

Onsite production cubes
Show case

- Smaller units installed on customer premises – hotels, resorts, theme parks on selective basis

OPERATING FACILITIES IN ORLANDO FLORIDA

Orlando large scale facility

- Operational February 2020
- Vertical farm with largest output in Southeast US → supplying key customers in Florida
- Construction completed **on time** and **on budget**
- Can rapidly be replicated → **New facilities/cities underway**

Marriott World Center

- HyCube installation at Marriott flagship hotel
- Marriott Orlando World Center is the largest Marriott hotel in the World

Tradeport R&D and production facility

- **R&D unit** - plant science and technology
- M**icrogreens** production

DESIGN AND CONSTRUCTION

Overall

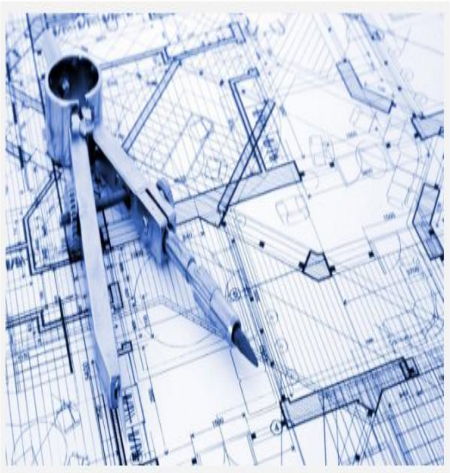
- Established supply chains
- Rollout: replicate experience on design, installation, lease agreements and work relationships with architects and design companies
- Can manage multiple construction projects at a time

Layout/Design

Architects, Engineers and Design team

- *Modular designs* – based on components that can be reused in various configurations.
- *Energy efficient design methods* - optimize temperatures, humidity and reduce heat loads.
- *Quick installation and set-ups* - once county jurisdictions have approved design plans and long lead items can be purchased.
- *Standardizing equipment* - shorten lead times and internal review by design teams to create streamline franchise style builds.
- *Design teams* - architectural space management, internal infrastructure, value engineering and design/planning, sustainability, government relations

Architecture Design



EXPERIENCED MANAGEMENT TEAM

Daniel Malechuk, MBA

CEO

- Over 15 years experience in the food industry in senior level positions in multinational companies spanning sales, supply chains, and operations
- BS Business Management and MBA

Josh McCollom

Head of Construction & Installations

- Over 15 years of experience managing commercial construction projects
- BSc in Engineering

Rodolfo Ochoa

Head of SW Technology & Automation

- Over 12 years of experience in SW development with expertise in cloud computing, big data and business intelligence systems
- MSc in Information Technology

Barry Blakely, MBA, CPA

Controller

- 20 years of experience in general accounting, financial planning and reporting, fixed asset management and supply chain management
- BSc in Accounting and MBA

Cristian Toma, PhD

CTO and co-founder

- Over 25 years of experience in start-ups, technology development and R&D management
- PhD in Electronics Engineering and PDEng Degree in SW Technology

Jeremy Johnston

Chief Information Officer

- Over 15 years experience in information technology with extensive experience in global enterprise application design and implementation.
- MSc in Computer Science and MBA

Jack Roskind

Head of Logistics

- Over 30 years of experience in managing logistics operations
- Served for 20 years in the US Air Force
- MSc in Supply Chain Management

Nicholas Villari

Head of Production

- Over 6 years of experience as a master grower and farm manager
- BSc in Plant Science

BOARD OF DIRECTORS

Bjorge Gretland

Executive Chairman of the Board

- Broad experience from venture capital, mergers & acquisitions and capital markets
- Holds a Master of Economics and a PhD in strategy and finance

Umur Hursever

Board Director

- Partner at LGT Lightstone
- 18 years of investment experience
- Holds a BA in Economics and Mathematics

Oystein Landvik

Board Director

- CEO of UNION Group
- More than 30 years of experience in commercial real estate

Nigel McCleave

Board Director

- Associate Director at LGT Lightstone
- Broad experience as an entrepreneur, investor, and investment banker
- Holds an MBA and a BA in Political Science

Erik Sauar

Board Director

- More than 20 years of experience in the global PV industry
- Inventor of about 35 patents and patent applications
- Holds a doctorate degree in Thermodynamics

Cristian Toma

Board Director

- Over 25 years of experience in start-ups, technology development and R&D management
- Holds a PhD in Electronics Engineering and a PDEng Degree in Software Technology

SUMMARY

Leading Hydroponics technology for growing greens

- *"Semiconductor based" clean room technology, no contamination of air and water, safe produce*
- *Advanced plant science: optimized nutrient mixes/uptake and light recipes*
- *Leading IoT, Big Data and AI - automated production controls and machine learning*

Highest quality, safest produce grown efficiently

- *Production of best quality, highly nutritious vegetables at lowest cost*
- *Cleaner than organic produce – no pesticides, non–GMO, no human pathogen contamination*
- *Higher production yields, more cost efficient, environmentally sustainable production*

Rapid roll-out

- *Large scale facility design allow for rapid roll-out*
- *New facilities and cities are underway*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