

TECHNOLOGY TO FEED A CHANGING WORLD

WE EMPOWER FARMERS TO LOCALIZE FOOD & FEED

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CubicFarm Systems Corp. ("CubicFarms") is an award winning ag-tech company, founded by farmers. We believe to protect our resources and ourselves, food and animal feed must be localized, and grown indoors by farmers. Our agriculture technologies help farmers to produce consistent, indoor, high quality nutritious food and feed, at commercial scale, in any climate, 365 days a year.

Our indoor farming technologies solve long chain food dependence and farmer unpredictability. We convert wasteful long supply chain agriculture into local chains that benefit our people, resources, and economy. We create local independent food ecosystems now and for future generations. OUR TECHNOLOGIES DIRECTLY ADDRESS URGENT GLOBAL FOOD & FEED PRODUCTION NEEDS

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#### SAFE & HEALTHY FOOD

Current research indicates there is a growing global trend in consumers demanding safe and healthy food options.



#### SUSTAINABLE FARMING

The proven environmental and social benefits of locally grown food, and sustainable methods of production and distribution, will help reduce carbon footprints.



#### **POPULATION CAPACITY**

Ensuring our food production can feed the projected global population growth of 10 billion people by 2050.



#### **TECHNOLOGY & AUTOMATION**

Innovative indoor farming solutions are needed to address resource depletion in arable land, biodiversity, and fresh water supply.



#### FARMER SUCCESS

With the increasing farming risks of unpredictable weather, pests, and disease, we need to help our farmers be successful.



#### SUPPLY CHAIN CONFIDENCE

With the Coronavirus pandemic, labour, and transportation challenges, now more than ever we need confidence in our local food sources and supply chain.



**95%** Your CubicFarm System uses 95% less water than traditional growing methods, requires no pesticides, and results in a smaller farm footprint while increasing your yield per square foot.

## FOUNDED BY FARMERS

CubicFarms' agriculture technology was developed by Jack Benne, founder of Bevo Farms, one of North America's largest plant propagation businesses, and his son Leo Benne, Chief Product Officer. Bevo's decades of growing experience have culminated in the next generation of ag-tech.

In 2008, Jack Benne and his son Leo Benne, both farmers themselves, visited a farm in Puerto Rico that had been devastated by a hurricane. They saw how difficult it was to grow fresh produce outdoors in challenging conditions. That sparked the idea for our CubicFarms indoor growing system that grows fresh produce indoors, 365days a year, anywhere in the world.

Our HydroGreen Grow System, an indoor farming technology for growing nutritious livestock feed, was developed by Dihl Grohs for his ranches in South Dakota, Utah, and Missouri. Dihl developed the concept of low-maintenance animal feed growing for his cattle in areas with limited precipitation. CubicFarms acquired HydroGreen in 2019.



We're passionate and driven to transform the agriculture industry to feed a changing world. We believe it's our responsibility to shorten the food and feed supply chain with our local, onsite agtech. We are a team of innovative, entrepreneurial hard workers who are future focused and enjoy working together for our collective greater good. Our excellent and rewarding work is driven by our core values. We're thinking about the future now, and how to get there, together.

### **BE PART OF THE AGRICULTURE REVOLUTION**

We believe that together with our team, Farmer Partners, investors, and ecosystem supporters, we will transform the agriculture system to enable local food and livestock feed independence. We are creating farming technology to successfully feed our changing world. As a result, we are significantly improving independent access to quality food, maximizing crop yields, all while reducing the environmental costs of food and feed production in a meaningful way in our communities.

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## INDOOR GROWING SOLUTIONS

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We are very proud to have assembled one of the most compelling portfolios of proprietary automated growing systems available in the world.



## **CUBICFARM SYSTEM**

The CubicFarm System grows delicious leafy green produce, herbs, and microgreens. By providing the perfect climate with the optimal amount of light, nutrients, water, humidity, and temperature in an automated, hydroponic, controlled growing environment, the plants reward you with the most nutritious, delicious, and best tasting produce, yearround. From propagation to harvest, our commercial scale hydroponic, automated, indoor growing technologies grow more in less time than traditional outdoor farming. With our unique Crop Motion<sup>™</sup> technology, hundreds of growing trays move under LED lights along a path from the back to the front of the modules, getting the right amount of light, water, and air flow to maximize their growth.







# CUBICFARM SYSTEM PROPAGATOR MODULES

Our patented propagation module delivers vastly improved cost, efficiency, and quality benefits over traditional propagation methods in widespread use today.

Each propagation module accommodates up to 120,000 plant sites and delivers nearly a 100% germination rate. Our Propagator gives growers the cost savings opportunity to convert inefficient floor-growing greenhouse space into optimized commercial growing space, all while improving germination rates and overall plant quality.

Our CubicFarms Crop Motion<sup>™</sup> technology tray system provides air pruning and bottom-up watering systems that allow for seamless, shock-free transplanting while helping to maintain plant health, increase plant stem strength, and reduce time to maturity. Our proprietary Crop Motion<sup>™</sup> technology conveyor system also greatly reduces the amount of labour required to plant and transplant by bringing plants back to the operator every 90 minutes, making the entire process more efficient.

With your CubicFarms Propagator you can customize your growing environment to a specific crop. Our enclosed propagation chamber allows you to adjust lighting, CO<sub>2</sub> levels, nutrition and water levels to maximize the germination microclimate, which is not typically possible in traditional greenhouse propagation.

Our CubicFarms Propagator is an ideal solution for vertical farming, greenhouse growing, nurseries, as well as the floral, hemp and nutraceutical industries.





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We make indoor growing economical with our Crop Motion<sup>™</sup> technology. Every 90 to 120 minutes (depending on the crop), approximately 250 trays of plants will pass by you so you can stand in one spot and do all of your harvesting and planting. The modules let you have many fewer lights than any other system and much less labour, maximizing your cubic growing space. We get far more yield than any other system because the module brings everything to the worker at the front and you don't need to leave any access hallways for people.



Dave Dinesen CEO CubicFarm Systems Corp.

#### CUBICFARM SYSTEM

## **CULTIVATOR MODULES**

Our CubicFarms Cultivator module is a more economical and efficient farming solution than the typical stationary "rack and stack" vertical farming solutions available.

Our patented Cultivator uses Crop Motion<sup>™</sup> technology - a unique undulating conveyor of interchangeable growing trays housed within a customized 40-foot shipping container.

Our proprietary growing technology provides our commercial grower customers with many unique benefits. You can customize and automate your growing environment and schedules by crop type! By using our growing app to monitor module controls and the Fertigator irrigation system, the versatility of your crops and crop densities can be maximized for ultimate productivity and efficiency.

One of our customers' favourite benefits is the significant savings in labour costs with our modules. The automated conveyor system brings plants to the operator, requiring a smaller and stationary growing team who can work at a height that is ergonomic and comfortable. Energy cost savings is also a popular benefit to our customers as the modules uniquely provide just a single row of lighting for all the plants inside the module.

If you are looking for a vertical indoor farming solution that can scale to meet your production goals for individual crops, our modular container structure is an ideal solution.



# **FERTIGATOR**

The CubicFarms Fertigator provides automated, consistent delivery of nutrients, lower labour costs, and minimizes the risk of human error in the nutrient mixing process.

Nutrient recipes can be mixed and stored in 1,000-litre batch tanks before being fed to individual growing modules. Automated pre-mixed water/nutrient solutions ensure that nutrient-rich water is available for all modules at all times. All distribution of water and nutrients can be controlled through our CubicFarms growing app.

Our irrigation and nutrient delivery system works in conjunction with the Propagator, Cultivator, or both. The nutrient mix is stored inside the same-sized stainless-steel shipping container as other CubicFarms modules and is fully automated, eliminating the need for manual mixing of nutrients.

The Fertigator provides a consistent delivery of nutrients to crops and helps ensure consistent growth.



SUPERIOR & SUPERIOR & CONSISTENT ANIMAL FEED WITH SIGNIFICANT ENVIRONMENTAL BENEFITS



## HYDROGREEN GROW SYSTEM & VERTICAL PASTURES™

The HydroGreen Grow System and HydroGreen Vertical Pastures<sup>™</sup> are patented modular on farm technologies to produce predictable and consistent commercial scale nutritious livestock feed yearround. Completely automated, the HydroGreen animal feed growing technologies grow highly nutritious livestock feed from seed to feed in six days.

Using less water, land, energy, and labour, the HydroGreen Grow System provides farmers with the technology they need to keep growing all year long, performing all automated growing functions including seeding, watering, lighting, harvesting, and re-seeding – all with the push of a button. The HydroGreen Grow System not only provides superior nutritious feed to benefit the animal, but also enables significant environmental benefits to the farm without the typical investment in fertilizer, chemicals, fuel, field equipment, and transportation.

The HydroGreen Grow System is offered in a range of sizes making it easily scalable with multiple systems to meet your demand.





The HydroGreen Grow System delivers a high quality, consistent source of livestock feed regardless of weather or market conditions. Even more importantly, the nutritional benefits of this feed source have shown to produce significant health and quality benefits to the animal and its related end-products.

The HydroGreen Grow System was developed with animal nutrition in mind. Sprouted feed allows for increased density of proteins and vitamins, is highly digestible, and requires less consumption of dry matter, which directly impacts your herd's health.



#### REDUCED WATER CONSUMPTION

Turning on a tap is easy enough, but it comes with a cost to the environment and to the wallet. The HydroGreen Growing System uses just a fraction of the water of conventional in-ground growing methods leading to more than a quarter million gallons of water saved per acre of green feed produced.



#### FULLY AUTOMATED

You have complete control of the fully-automated growing system. The dashboard shows you each stage of the six-section HydroGreen Grow System and allows you to adjust all functions including seeding, watering, lighting, and harvesting.



Creating a highly digestible, nutritious green food is only part of the HydroGreen story. The growing system achieves these enviable results with a reliance on less: less land, less work, no chemical or fertilizer inputs. Because the system is fully automated, you are in control of the consistent and reliable production of high-quality nutrition for your livestock. Plus, if you ever need help, the experts at HydroGreen are available to guide you.

## OUR DIFFERENCE TECHNOLOGY TRULY SETS US APART

Our mission is to help farmers to utilize innovative technology to produce cost efficient, healthy, scalable, and consistent commercial scale food and livestock feed.

Our modules were designed to provide the following technology and automation benefits:

# QUALITY

Our systems give plants the perfect day, every day with our Crop Motion™ technology. Providing the perfect climate with the optimal amount of light, nutrients, water, humidity and temperature in a controlled environment; the plants reward you with the most nutritious, delicious and best tasting produce 365 days a year, anywhere in the world.

## CROP SCALE & CONFIGURATION

Each growing module is configured with interchangeable trays which make it easy to accommodate a wide variety of crop sizes and densities. Each growing module's internal environment can be customized to suit the crop it is growing.

#### ENERGY SAVINGS

Each CubicFarms growing module was designed for optimal growing. Compared to traditional "rack and stack" systems that require hallways and multiple layers of light, our systems utilize a single row of lighting which each tray of plants is brought up to at regular intervals. Our unique Crop Motion™ technology simulates outdoor growing indoors, to ensure that all plants receive the same amount of light and nutrients.

#### LABOUR SAVINGS

CubicFarms' Crop Motion<sup>™</sup> technology design also plays a significant role in reducing your labour costs and time. As the trays travel through the module, they arrive at the front of the module at the perfect height for planting or harvesting, meaning anybody is able to remain stationary while servicing an entire module.

#### LAND SAVINGS

When compared to traditional field farming, greenhouse growing, or warehousebased vertical farming systems, a CubicFarm System provides a reduced average footprint. Our modular containers maximize cubic space, enable easy co-location on existing sites and a much smaller land requirement to grow higher volumes of crops.

#### NUTRITIOUS & QUALITY LIVESTOCK FEED

The HydroGreen Grow System utilizes a unique process to sprout grains, such as barley and wheat, in a controlled environment with minimal use of land, labour, and water. The automated technology provides superior nutritious feed to benefit the animals, but also enables significant environmental benefits to the farm.

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Indoor farming is the way of the future and Calgary is in need of great quality produce. None of the other container-type indoor vertical farms are designed for a fully scalable commercial system with full-service support to help our farm to succeed. CubicFarms' farming industry expertise, installation, project management and training support, food brokerage consulting services and reasonable pricing just made sense.



Marc Shultz Calgary Customer HydraGreens

## MULTIGENERATIONAL FARMERS, NEW FARMERS & ENTREPRENEURS

Our CubicFarms team is committed to helping farmers succeed across the globe by utilizing automated technology to grow food and livestock feed sustainably and profitably. Below are some of our Farmer Partner success stories and feedback.





Swiss Leaf Farms is a family-owned farm located in Busby, Alberta. Their farm has 14 CubicFarm System modules installed and they plan on expanding to meet the retail produce demand from Sobeys, one of Canada's largest food retailers.

Swiss Leaf Farms is proudly supplying retailers across Western Canada, including Safeway, IGA, Thrifty Foods, Freson Bros. and FreshCo, with fresh lettuce, herbs and microgreens grown inside a CubicFarm System. 5-5

## ECODAIRY

The HydroGreen Grow System is installed and producing fresh livestock feed at the EcoDairy farm in Abbotsford, British Columbia. The system produces feed for its livestock and serves as an innovative demonstration unit to farm visitors.

The EcoDairy is the first demonstration dairy farm of its kind in Canada, showcasing innovative and sustainable dairy farm practices in partnership with Science World British Columbia, the province's leading science and technology education facility.

YEAR-ROUND GROWING, INCLUDING IN HARSH WINTER CONDITIONS!

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Hear what food retailer Freson Bros. has to say about the quality of Swiss Leaf Farms' produce.

PRODUCING LIVESTOCK FEED AND A DEMONSTRATION DAIRY!

Listen to Bill Vanderkooi, the owner of EcoDairy, talk about the health benefits of feeding his herd fresh green feed from the HydroGreen system.

## **OUR IMPACT**

With our commercial scale, automated, indoor growing farming technologies and support services, we help our Farmer Partners to truly make an impact in the world.

#### IMPACT ON PEOPLE

- ✓ EMPOWERING FARMERS
- ✓ NUTRITION & QUALITY
- ✓ FOOD SAFETY
- TOOD SALETT
- High quality, fresh produce
- Uniquely delicious taste
- 45% more nutrients
- Increased food safety, less handling
- Non-GMO
- 100% pesticide free
- Living lettuce root attached
- Less waste chop root & serve
- Community access to fresh food
- Increase consumption of vegetables
- Pandemic-proof produce

#### IMPACT ON NATURAL RESOURCES

- ✓ FEWER NATURAL RESOURCES
- ✓ RESOURCE RESPONSIBILITY
- ✓ FARMABLE FOREVER
- 95% less water used
- Reduced transportation
   GHG emissions
- Reduced land footprint
- Maximized cubic growing space
- Crop Motion<sup>™</sup> technology (plants movement)
- Automated, resource efficient practices
- Less energy using a single row of lights
- Clean growing environment

#### **IMPACT ON ECONOMY**

- LOCAL JOBS
- FARMER ADVOCACYFARMER SECURITY &
- INDEPENDENCE
- Commercial scale growing
- Single harvest access point
- Less labour required
- Local labour opportunities
- Less space-no scissor lifts, aisles, or walkways needed
- Multiple crop varieties
- We don't compete with farmers, we help them to succeed
- Local distribution, regional shipping
- Can be grown onsite (farm, business, distributor)
- Modular, scalable systems
- Fresh food production, 365 days/year
- Less expensive than warehouse vertical farming solutions
- CubicFarms Partner Farmer network

#### **OUR LEADERSHIP**

## **EXPERTISE IN AGRICULTURE, TECHNOLOGY & BUSINESS**

Our CubicFarms leadership team supports our customers through our expertise in propagation, cultivation, technology, engineering, manufacturing, customer experience, sales, marketing, finance, and global entrepreneurship.

### DAVE DINESEN

"It is my absolute privilege to lead our amazing team to create technology to help feed a changing world. The impact we are making on a global scale is phenomenal and most importantly, our technology is helping farmers to be sustainable and profitable." At the helm of our ship is our CEO, Dave Dinesen. Prior to CubicFarms, Dave served as the President of WideOcean Strategies Ltd., a boutique venture capital and consulting firm. In his role as President & Founder of BackCheck, a background screening company, Dave oversaw its merger with a UK-based company to form Sterling BackCheck. The company was later acquired by Goldman Sachs.

# JEFF BOOTH

Chairman

"CubicFarms has developed a leading technology to enable a new category of indoor farming that drastically improves the efficiency of growing nutritious food for people and livestock. I believe the company has an almost untapped opportunity in front of it by significantly reducing the environmental cost of food production in a meaningful way." Steering our leadership team is the Chair of our Board of Directors, Jeff Booth. Jeff is a recognized thought leader on entrepreneurship, technology and e-commerce, featured in major publications such as Forbes, TechCrunch, Fast Company, Entrepreneur, Bloomberg, and The Wall Street Journal. Jeff was directly responsible for growing innovative online marketplace BuildDirect.com to over \$120 million in annual revenues.



#### LEO BENNE Chief Product Officer

"The goal of the CubicFarms technology is to develop a method of growing that can be done by anybody, anywhere in the world. Each module is climate controlled, allowing the perfect environment at every stage of the plants' life." Continuing our remarkable innovation and momentum in automated commercial-scale indoor farming, Leo, our Chief Product Officer leads our Research and Development team. Leo has over 30 years' experience in plant propagation with Bevo Farms and has played a central role in developing the CubicFarms automated technology.



#### DAN SCHMIDT President, HydroGreen

"I'm honored to lead the HydroGreen team and thrilled to introduce farmers to our automated, onsite, commercial-scale livestock feed technologies. We're doing more with fewer natural resources, using technology to support farmers year-round and ultimately, empower them." Dan has spent more than 20 years forging a successful, proven track record for building commercial brands with some of the largest heavy agricultural equipment manufacturers in the world. He has been responsible for establishing and growing independent dealer-partner channel relationships for multi-national organizations, including John Deere, JCB and Stanley Infrastructure, while mentoring, developing, and advancing the teams that work with him.



"CubicFarms is a fast-paced company on the right side of several important consumer trends, namely food security and healthy eating. At the same time, our technology limits both greenhouse gas emissions and the use of scarce resources like water and energy. The company has the ability to disrupt the way we think about feeding the globe." Actively keeping our team cost-efficient and strategic, our Chief Financial Officer, Tim's financial leadership is essential to our success. His 25 years of finance experience in investment banking and venture capital provides our team with the financial expertise to grow and impact global food production. Tim currently holds directorships in several publicly traded companies.



JO-ANN OSTERMANN Chief Customer Officer

"A CubicFarm System is a farm, a group of modules that all have to work together in harmony. We teach and support our customers step by step through the foodsafe operation process, making sure we get them the right system for the right kind of production they need to be successful." With a passion for farming and customer experience, our Chief Customer Officer, Jo-Ann was one of CubicFarms' earliest team members. She is one of the few people in North America to have opened and operated a vertical farming operation on a commercial scale. Her expertise across multiple disciplines directly fuels our commitment to provide an excellent CubicFarms customer experience.



#### EDOARDO DE MARTIN

Chief Technology Officer

"I want to use my experience to help make a meaningful impact on the world, something that my children and future generations will be proud of. I was blown away by CubicFarms' innovative solution to indoor automated growing. In my opinion, this company has really focused on what is the most important: understanding what growers need." Former Microsoft GM and GM of Dynamics Mixed Reality Applications on HoloLens, Edoardo is an experienced and well-respected member of the technology industry. He played a key role in global operations and Dynamics 365 product team and has expertise in AI, robotics, and mixed reality technologies. He delivered *Need for Speed Underground*, the franchise-leading, number-one selling game worldwide and will be part of developing the next generation of our technologies.



SANDY GERBER Vice President, Marketing & Communications

"CubicFarms possesses a winning combination of industry-leading technology and growing expertise, fast-paced culture of innovation, and vision to improve food production efficiencies and food security – to ultimately help farmers feed the world sustainably and profitably." Driving our efforts to share our story and our unique, automated, agriculture technology solutions, Sandy is our VP, Marketing & Communications. Known as a change agent, she's revitalized marketing and communications programs for over 20 years, including some of Canada's most beloved brands. Sandy is instrumental in promoting our modules' significant results.

## OUR SALES PROCESS & CUSTOMER SUPPORT TEAM

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As a CubicFarms Farmer Partner, we partner with you to lead you through a detailed process to help you succeed. Success begins by understanding your particular needs and finalizing your farm, business, and system requirements.

To deliver quality, automated indoor vertical farming technology to our global customers, we are honoured to have a passionate and dedicated team of professionals across multiple disciplines. In your CubicFarms customer journey, you will experience skill and support from each of our great teams.

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#### SALES & ACCOUNT MANAGEMENT TEAM

Your first introduction to our CubicFarms team will be through one of our helpful sales and account management team members. This team helps you to identify your specific automated indoor vertical farming requirements and happily provides you with a demonstration of our modules. Our commitment to your success doesn't end after you sign the paperwork, our account management team continues to act as your resource to support decisions for your modules and farm as you scale and succeed.

#### LIVESTOCK FEED SYSTEM CONSULTING

Our HydroGreen customers find great value in our livestock feed system consulting services. Our very experienced team helps you to design your system and rations to meet your specific needs. Leveraging the team's industry expertise, scientific research and farm customization plans, our team ensures your HydroGreen Grow System is properly and successfully integrated into your existing operation.



#### PROJECT MANAGEMENT TEAM

Effective Project Management is at the heart of all successful projects. Our professional PMPcertified Project Management team works closely with you to outline project deliverables and timelines, ensuring there are no surprises. We know the potential challenges our customers can face and as such, we diligently work to ensure the installation and daily functionality of your system runs smoothly.

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#### **CUSTOMER EXPERIENCE TEAM**

Our Customer Experience team works hard to help you be successful from the moment you choose us as your indoor vertical farming solution. This team manages and executes our subscription program which includes software updates, new crop growing protocols, optimization data, training and grower support, as well as the consumables program, which includes the supply of seeds, nutrients, substrates, and packaging to customers.

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#### **ENGINEERING TEAM**

The in-house Engineering team at CubicFarms is responsible for the creation, conceptualization and evolution of our module systems. This expert team develops detailed, specific and advanced components that make our systems unique, effective and efficient.

#### MANUFACTURING & INSTALLATION TEAM

Manufacturing for CubicFarms growing modules resides overseas in China and ships directly to our customers. Manufacturing for our HydroGreen modules resides in our South Dakota facility in the USA. Our centralized manufacturing process provides you with confidence to receive and scale your modules. Our Installation team is comprised of a world-class group of individuals who know your growing modules inside and out. Through the efficient delivery and installation of your system, no matter how big or small, you'll be delivering fresh product to the market quickly.

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#### SYSTEM TRAINING TEAM

Our training team helps to ensure you are confident and prepared to run your modules successfully. At our in-depth Farm School in-person or online training sessions, you will learn everything you need to know to operate your farm and grow quality crops in a controlled environment.

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The agricultural value chain is rapidly evolving and technology infrastructure to overcome the pains of traditional farming is sorely needed. CubicFarms is one part of the multivariable solution required to address this need for safe, reliable, environmentally-friendly and affordable food.



**Dwight Anderson** Chief Investment Officer Ospraie Ag Science

# OUR SUPPORTERS

We are very grateful for our CubicFarms supporters and champions who continue to support our innovative technology to feed a changing world.

CubicFarms is publicly listed on Canada's TSX Venture Exchange under the symbol "CUB". It is the only Canadian publicly traded company in the ag-tech, vertical farming space.

We believe in our vision to transform agriculture and so does our team and supporters. Management owns approximately 30%, Ospraie Ag Science, a leader investing in the agriculture value chain, owns approximately 21.5%, NuSkin Enterprises Inc., a company investing in innovative technologies, owns approximately 8%, Handelsbanken, one of Europe's largest environmental, social, and governance focused investors, owns approximately 7%., Blue Sky Farms, a commercial scale family-owned dairy, owns approximately 4.8%, and Burnett Land & Livestock Ltd., LLLP, owns approximately 1% of the company.

Our employees strongly believe in our mission. They're acting like owners of the company because they are with Grow Together, the company's employee share purchase & matching program.

## START GROWING PROFITABLY & SUSTAINABLY.

**LET'S CONNECT TODAY!** 

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CUBICFARMS.COM

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We can help you build a business plan.

#### WATCH OUR STORY

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Learn how CubicFarms is feeding a changing world.

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#### **BOOK A DEMO TODAY**

See our modules in action!