CubicFarm Systems is putting sustainability back into farming

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I've always been intrigued by vertical or modular farming. It may have been born out of the massive unutilized office space in downtown Calgary over the last several years as the energy industry went through a very challenging period. Beyond that, there's the bombardment of climate change news suggesting that there will be droughts and extreme weather impacting all forms of farming globally for the foreseeable future. And while climate change is somewhat uncontrollable, I recall seeing that there is a town in California's San Joaquin Valley that has sunk as much as 11.5 feet over the past 14 years due to subsidence resulting from all the water required for area farming being pulled from underground aquifers. That doesn't seem very sustainable to me but maybe I'm missing something.

Perhaps I'm getting a little too dramatic, but you get the picture. Supply chains and food security in an increasingly populous and volatile weather world are something we need to be wary of. Tack on a war encompassing some of the best agricultural lands in Europe and things become even more uncertain. We need to secure our food supply and control our destiny in a sustainable way. One company out there leading the charge is CubicFarm Systems Corp. ("CubicFarms") (TSX: CUB). CubicFarms is a leading local chain agricultural technology company developing and deploying technology to feed a changing world. Its proprietary ag-tech solutions enable growers to produce high quality, predictable produce and fresh livestock feed with HydroGreen Nutrition Technology.

The Company has two core business segments, the Fresh Division and the Feed Division. The Fresh Division operates using the patented CubicFarm™ System, which contains patented technology for growing leafy greens and other crops. The CubicFarm System addresses two of the most difficult challenges in the vertical farming industry, high electricity and labor costs, by using unique undulating path technology. The Crop Motion™ technology allows hundreds of growing trays to 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. 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 undulating conveyor of interchangeable growing trays is housed within a customized 40-foot shipping container and generates 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.

The Company's Feed Division operates using the HydroGreen Grow System, the Company's technology for growing nutritious livestock feed. HydroGreen technology has commercialized two Automated Vertical Pastures™, the DG66 (designed for small family farms of 100 – 500 animals) and the GLS808 (designed for larger commercial farms of 500 – 15,000 + animals). This system utilizes a unique process to sprout grains, such as barley and wheat, in a controlled environment with minimal use of land, labor, or water. HydroGreen Automated Vertical Pastures™ is fully automated and performs all growing functions including seeding, watering, lighting, harvesting, and re-seeding – all with the push of a button – to deliver nutritious livestock feed without the typical investment in land, fertilizer, chemicals, fuel, field equipment and transportation. And some of the statistics are quite astounding. A HydroGreen Grow System can

harvest daily and produce up to 365 harvests annually while utilizing 95% less water than conventional irrigated field crops. One HydroGreen Vertical Pastures™ (consisting of 12 grow modules) can grow up to 25 million lbs of fresh livestock feed every year while replacing 500 acres of farmland, equivalent to 380 football fields.

Another interesting stat is from a non-binding letter of intent to deliver 96 CubicFarm System modules in an innovative two-level cost-effective building design and controlled environment called a FreshHub, to be installed in Surrey, BC. On 1 acre of land, FreshHub will grow the equivalent of 100 acres of field production. The Company anticipates that the installation of this first FreshHub project will commence in the late part of the 2022 calendar year and be substantially completed by the end of the 2023 calendar year. In the meantime, as of the end of March the Company has a total of 203 modules under binding contract and deposit. The amount of CubicFarm System sales orders that are pending manufacturing and installation is approximately US$27 million.

CubicFarms provides an efficient, localized food supply solution that benefits people, the planet, and the economy. I find the water savings perhaps the most compelling factor behind this story but there are some other pretty interesting numbers. With a market cap of C$183.7 million, the Company isn’t cheap but they are well capitalized (C$21 million as of December 31, 2021) and can sign large contracts like the FreshHub at C$20 million. I am very curious to see how this story plays out over the next several months as I always like to see great IP translate into a profitable business. Especially if it helps create a more sustainable food supply for you and me.