

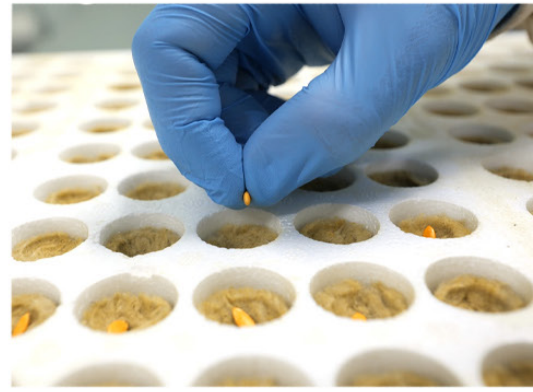


The company "Grow-tec" is a technological leader in developing advanced agricultural solutions in a controlled environment (CEA) known as Controlled Environment Agriculture. The company has developed an innovative indoor vertical farming facility for growing tomatoes and cucumbers, which is the first of its kind in the world. The facility's productivity per unit area is significantly higher than any existing solution. The company offers cutting-edge end-to-end technology solutions tailored for controlled environment agriculture with exceptionally high yields, including professional services and ongoing support. These solutions can be applied anywhere and throughout the year with minimum resources and maximum profitability. The company's vision is to be the best supplier of autonomous agricultural solutions in the field of controlled environment, sustainable agriculture, and to drive the global revolution in this sector.

By
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Shlomy Raziel, CEO of Grow-tec, says, "The solution we provide for vertical farming in a controlled environment, including hardware and software, is patented. This solution is unique because it is designed for the cultivation of fruiting vegetables such as tomatoes, cucumbers, and peppers, as opposed to solutions offered by other companies that are designed for leafy greens." He further adds, "Our choice to focus on the cultivation of these vegetables was based on the understanding that the field we are in is crowded with many players, and in order to distinguish ourselves, we had to tackle significant challenges that other players shy away from due to their technological and agronomic complexity. Furthermore, tomatoes account for 60% of the total vegetable consumption in the world, making it a highly attractive business proposition."

Since its establishment, **Grow-tec** has been involved in advanced agricultural projects. The company has gained extensive experience in controlled environment agriculture, including precise climate and environmental control, and the application of soilless technologies. Grow-Tec's customers come from countries facing traditional agricultural challenges such as unfavorable climates, lack of fertile soil, water scarcity, labor shortages, and more. The company's success is based on its unique expertise and multidisciplinary capabilities, including ergonomics (identifying optimal conditions for each plant), technological know-how (providing the solution for creating the required conditions), operational understanding (establishing efficient and effective production systems and supply chains), commercial knowledge (building a business model that adds high value to the customer), and more.





"Our next step is to fully integrate between the automated systems and advanced robotics, replacing manual processes such as grafting (connecting plants to carrying threads) and automating the entire harvesting process."



Grow-tec offers its customers high-yield solutions for growing tomatoes and cucumbers under controlled environment conditions with exceptional yields, anywhere, throughout the year (independently of seasonal constraints), and with ultimate quality and freshness.

Challenges of Modern Agriculture

Agriculture is one of the oldest human pursuits deeply embedded in human history. The development of agriculture is crucial to sustain the growing global population at all times. Modern agriculture involves advanced systems for precise irrigation, fertilization, and pest control. Nevertheless, it faces a variety of challenges that make it difficult to provide an effective and efficient solution for the food needs of the entire population, particularly in densely populated urban areas and regions susceptible to dramatic climate changes. Here are the challenges:

- 1. Food Security:** Disruptions in the supply chain, as seen during the COVID-19 pandemic, emphasize the need for local food production to ensure critical food supply. Additionally, there is a shortage of labor and skilled workers in the agricultural industry.
- 2. Climate Change:** Climate change affects crop yields, reduces water supply, makes food production unpredictable, and increases the dependency on long-distance transportation.
- 3. Consumer Demand:** Changing consumer preferences, such as the "farm to table" movement, increase the demand for fresh and locally sourced produce without pesticides.

Technological advancements in controlled environment agriculture, especially in urban areas, create new rules for the game and provide effective solutions to these challenges.

The benefits of this technological revolution include:

- 1. Flexibility and Localization:** It allows for year-round cultivation of any plant, reducing the distance between production and consumption, improving product freshness, and reducing transportation costs and carbon emissions.
- 2. Resource Conservation and Efficiency:** It minimizes resource usage, including soil, water, fertilizers, and labor. It operates in a closed cycle without external pollution, chemicals, or pests. It also maximizes yield per unit area and minimizes resource waste.
- 3. Higher Quality and Healthier Produce:** It allows for the production of premium-quality and healthier crops, free from disease and pesticides.

Shlomi Raziel, CEO of Grow-tec, explains the technological revolution in controlled environment agriculture, emphasizing the importance of clean rooms and specialized environmental conditions for optimal plant growth. The ideal conditions include inert substrate, precise temperature, humidity control, carbon dioxide supplementation, and advanced LED lighting. These factors contribute to high-quality, fresh produce that is free from contaminants. Grow-tec offers comprehensive solutions for the controlled environment cultivation of tomatoes and cucumbers, delivering exceptionally high yields, year-round production, and ultimate quality and freshness. Their solutions include advanced technologies for autonomous irrigation, precise climate control (HVAC), and sophisticated artificial lighting, all managed through a central computer and user-friendly application.



Professional Services:

Professional consulting, facility planning, design, and implementation, including full Turn-Key project delivery. Post-installation customer support.

Supply of Inputs:

Supply of essential inputs such as seeds, substrates, and other materials vital for precise facility operation according to the protocols established by the company.

Modern agriculture includes advanced systems for precise irrigation, fertilization, and pest control. However, it faces various challenges that make it difficult to provide an effective and efficient solution to the food needs of the entire population, especially in densely populated urban areas and regions subject to dramatic climate changes.

Grow-tec's solutions are based on in-house development and original equipment manufacturer (OEM)

branding. They provide complete automation and optimization of growth conditions using advanced sensors that collect real-time data and a central control system that manages all aspects: irrigation, fertilization, temperature, humidity, carbon dioxide (CO₂), and more. These systems are highly energy-efficient and contribute to sustainability. Shlomi Raziel, CEO of Grow-tec, discusses their next steps, which involve integrating automation systems with advanced robotics to replace manual processes such as pollination and harvesting. They also plan to offer larger, highly efficient facilities to enable customers to produce a full salad in one place.



Who is the company Grow-tec?

Grow-tec, was founded in 2004. The company initially focused on planning intensive agriculture projects in challenging climate areas, enabling customers to engage in agriculture in extremely challenging fields. In 2018, the company introduced unique drying rooms for medical cannabis and became the exclusive supplier to the largest facility in Israel, including a groundbreaking project in California. In the same year, the company introduced an autonomous sensing-based irrigation, fertilization, and climate control solution, as well as a unique LED lighting solution. In 2022, the company established a self-sustained original demonstration system for growing tomatoes and cucumbers, a groundbreaking solution for controlled environment agriculture. In 2023, the company introduced a commercial controlled environment agriculture solution for fruiting vegetables and began expanding its presence in the United States.