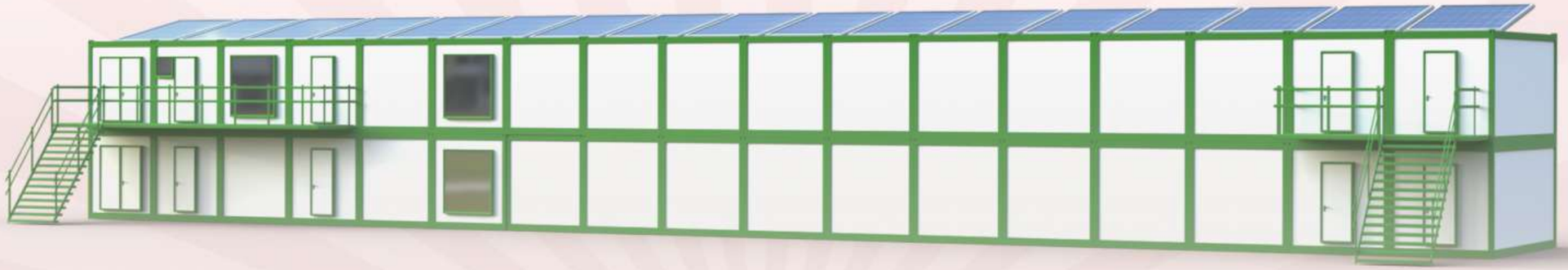
GreenState
Smart Modular & Vertical Farming

Zero Emission - Modular & Vertical Farm

Modular and vertical farming solution 100% powered by

Renewable energy resources



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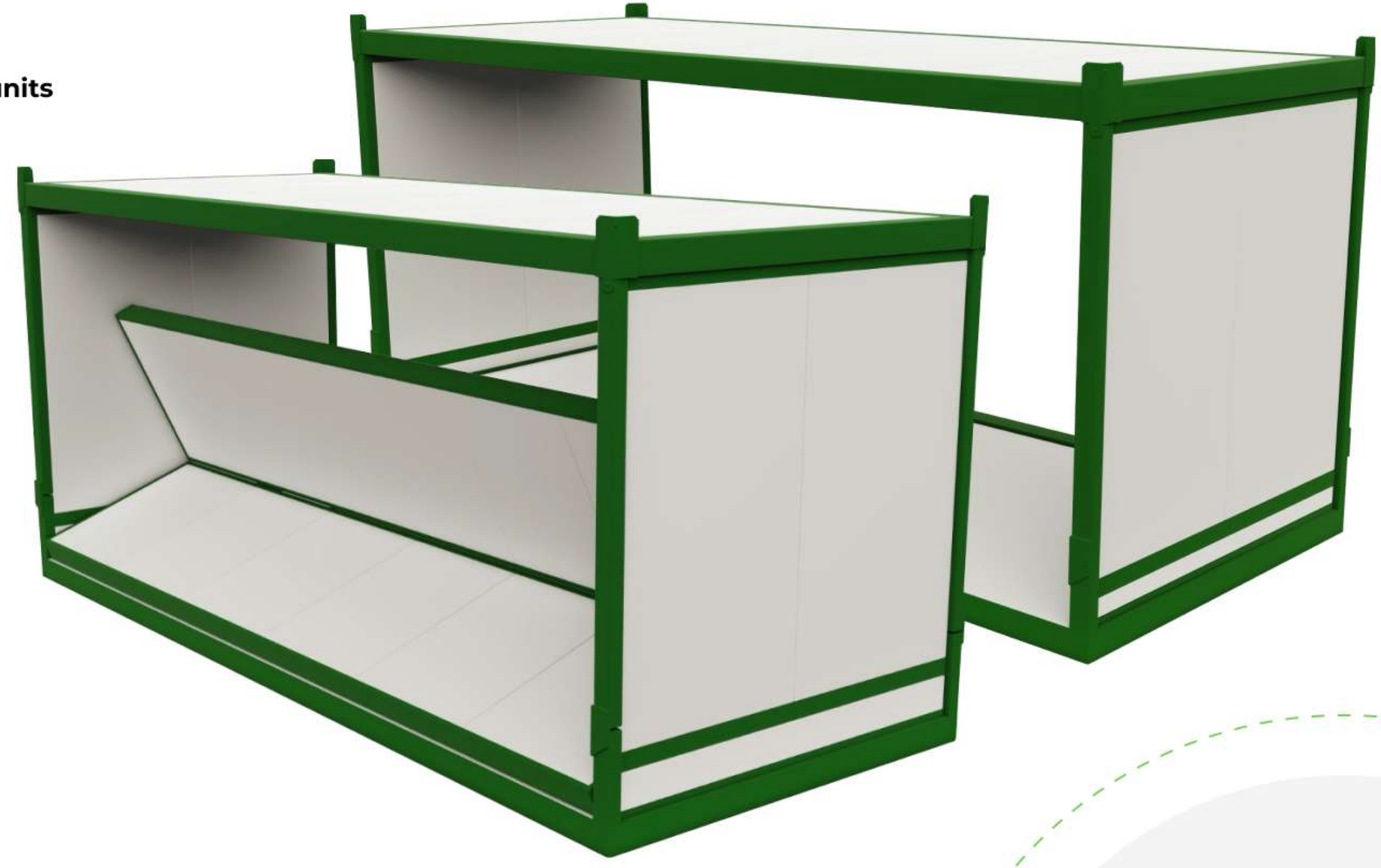
1 Modular solution (Lego principle)

- **Steel frame** - Isolation Panels from 4cm to 10cm
- Very **easy to assembly**
- Creation of **different rooms and units**
- **ISO** certified
- Fireproof up to **90 minutes**



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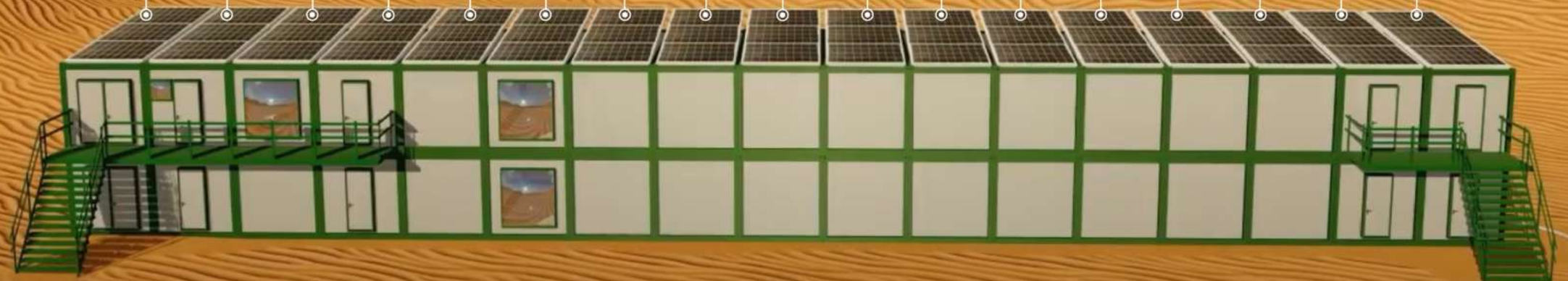
GreenState 2.0

REFRIGERATOR
Module 1

PACKAGING
Module 2

PRODUCTION/GROWING
Module 3

TECHNICAL ROOM
Module 4



2 Full Cycle Solution

Innovative design and **stackable solution** give you an opportunity to build a solution **according to your needs.**

For example, we could create **6 different growing chambers** for strawberries, **6 technical rooms**, **3 packaging rooms**, **3 refrigerating rooms**, and **one meeting room**.
The whole solution could go up to **three floors** in height and even a **thousand modules horizontally**.

The third floor could retain the steel frame construction, but the **isolation panels** could be replaced with **plexiglass** and with this solution, for example, **tomatoes** and **cucumbers** could be grown.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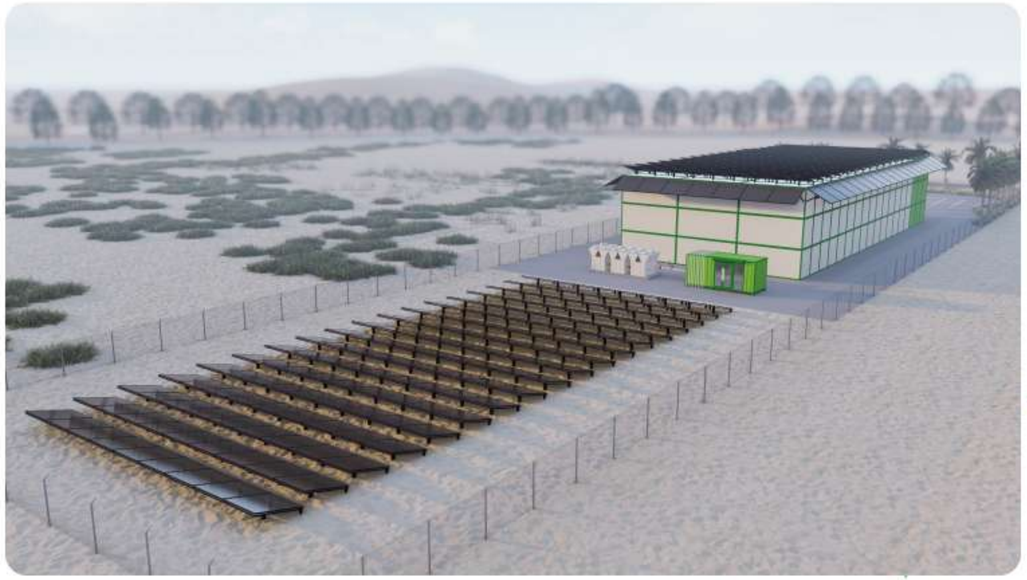


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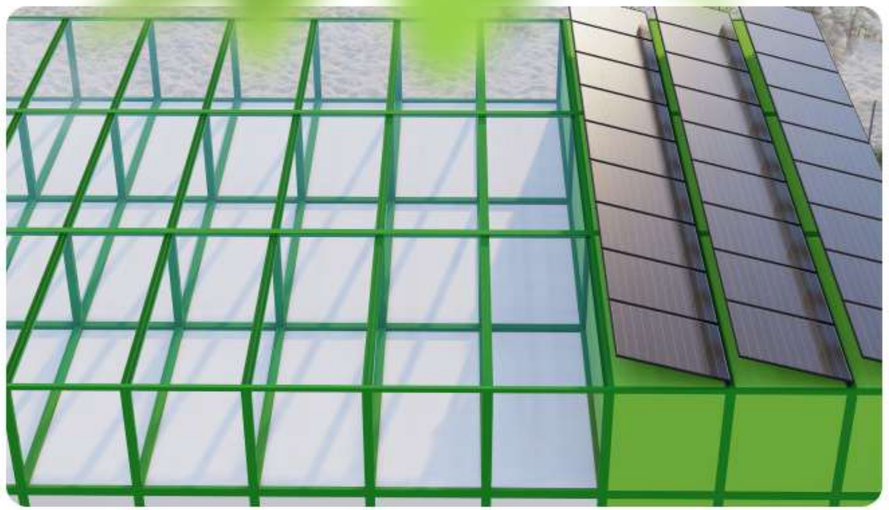


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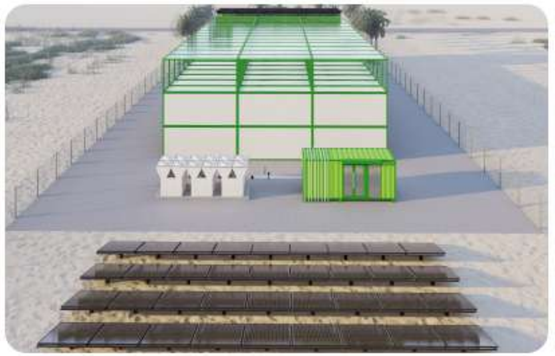


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3 Applicable for almost every agricultural product

Current Flagship farm in Neuhausen can simulate **almost every microclimate**. Our **HVAC system** has managed temperatures of **-60 to +70 celsius degrees**, and **15 changes of fresh air** per hour. Samsung Full Spectrum Light can provide enough u/mols for each agricultural product.

Strawberries are a new trend product that is entering the vertical farming industry worldwide. GreenState can be the **first company in Dubai** to provide strawberries grown in a local vertical farming facility.

In order to achieve maximum capacity and profitability we are advising that strawberries production stays manual and not automated, based on the **„dripping“ irrigation system** in order to firstly scale on product quality and yield maximization.

Strawberries in numbers

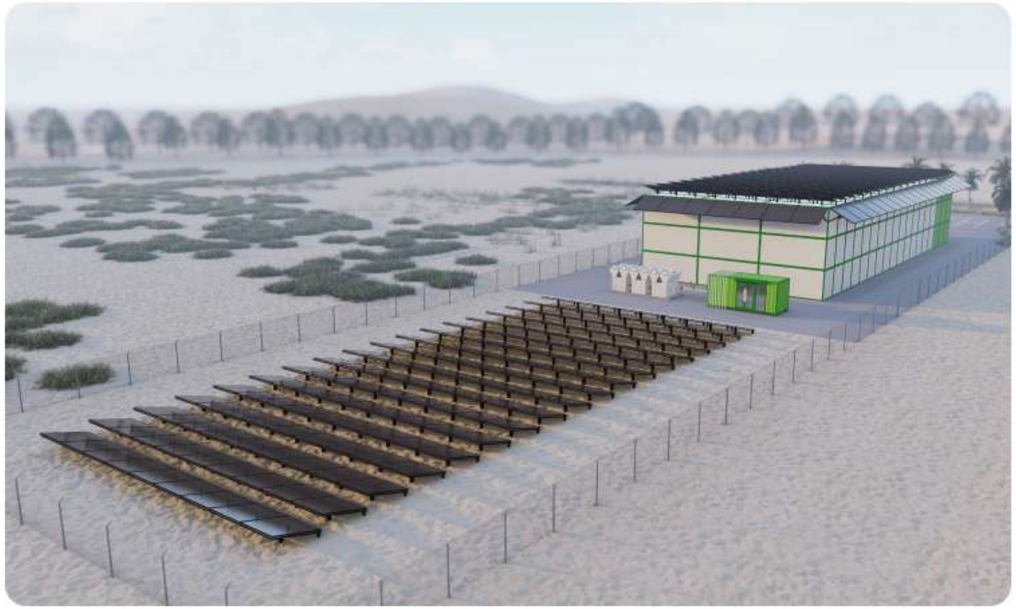
Floor area (sq. m)	200	450	900	2’150
Height (m)	6	6	6	6
Growing area (sq. m)	400	1’000	2’000	5’000
10 x 20 inches rockwool sheets	5’800	14’500	28’900	72’400
Yield per month (kg)	**2’200**	**5’500**	**11’000**	**27’500**

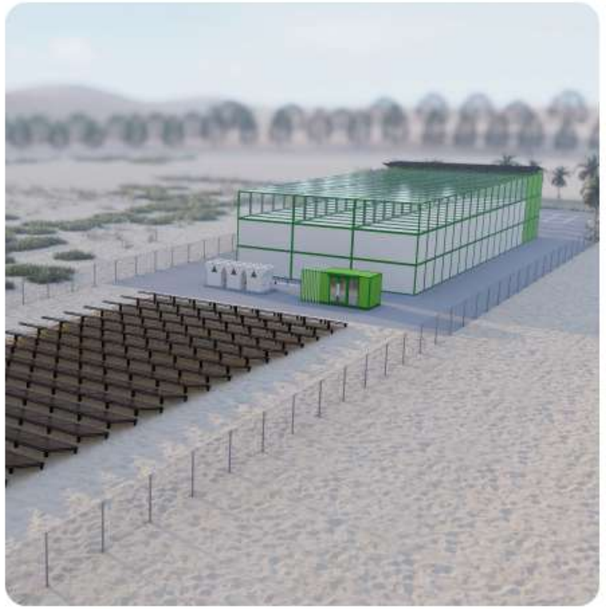
4 Sustainable solution

GreenState AG is embarking on an exciting journey to revolutionize **Dubai's agriculture industry**. Our visionary approach combines **cutting-edge vertical farming technology** with a commitment to **sustainable strawberry production**. These state-of-the-art facilities will not only bring **fresh, juicy strawberries year-round** to Dubai's residents but will also lead the way in **maximizing space utilization**, conserving precious **water resources** and significantly **reducing carbon emissions.**

Our mission goes beyond strawberries; it's about **fostering** a more **sustainable future for Dubai**. By harnessing the power of **controlled environments**, **renewable energy**, and **advanced farming techniques**, we aim to set new standards in **urban agriculture**. Furthermore, our commitment to community engagement and job creation will strengthen **Dubai's agricultural ecosystem**.

Join us on this journey as we cultivate not just strawberries but also a **greener, more sustainable Dubai** through our **innovative** and **eco-conscious farming practices**. GreenState will make Dubai a beacon of **sustainability** and a model for **smart agriculture** in the region.





5 Year-round production

Vertical farming offers an innovative approach to strawberry cultivation, enabling **year-round production** of delicious and high-quality strawberries within **controlled**, **space-efficient environments**. This method maximizes crop yields, reduces resource consumption, and ensures a consistent supply of fresh strawberries regardless of seasonal limitations.

Strawberries can thrive in vertical farming systems, thanks to the **controlled environment** and precise management of growing conditions.

1. **Growing System:** Vertical farms can use various systems to grow strawberries, including hydroponics, aeroponics, or aquaponics. Hydroponic systems, where plants grow in nutrient-rich water without soil, are commonly used for strawberries.

2. **Lighting:** Adequate lighting is crucial for vertical farming. LED grow lights are often used to provide the right spectrum and intensity of light for strawberry plants. The lighting system must be adjustable to mimic natural daylight patterns.

3. **Temperature and Humidity:** Controlling temperature and humidity is essential for strawberry growth. Vertical farms allow for precise climate control, ensuring optimal conditions year-round.

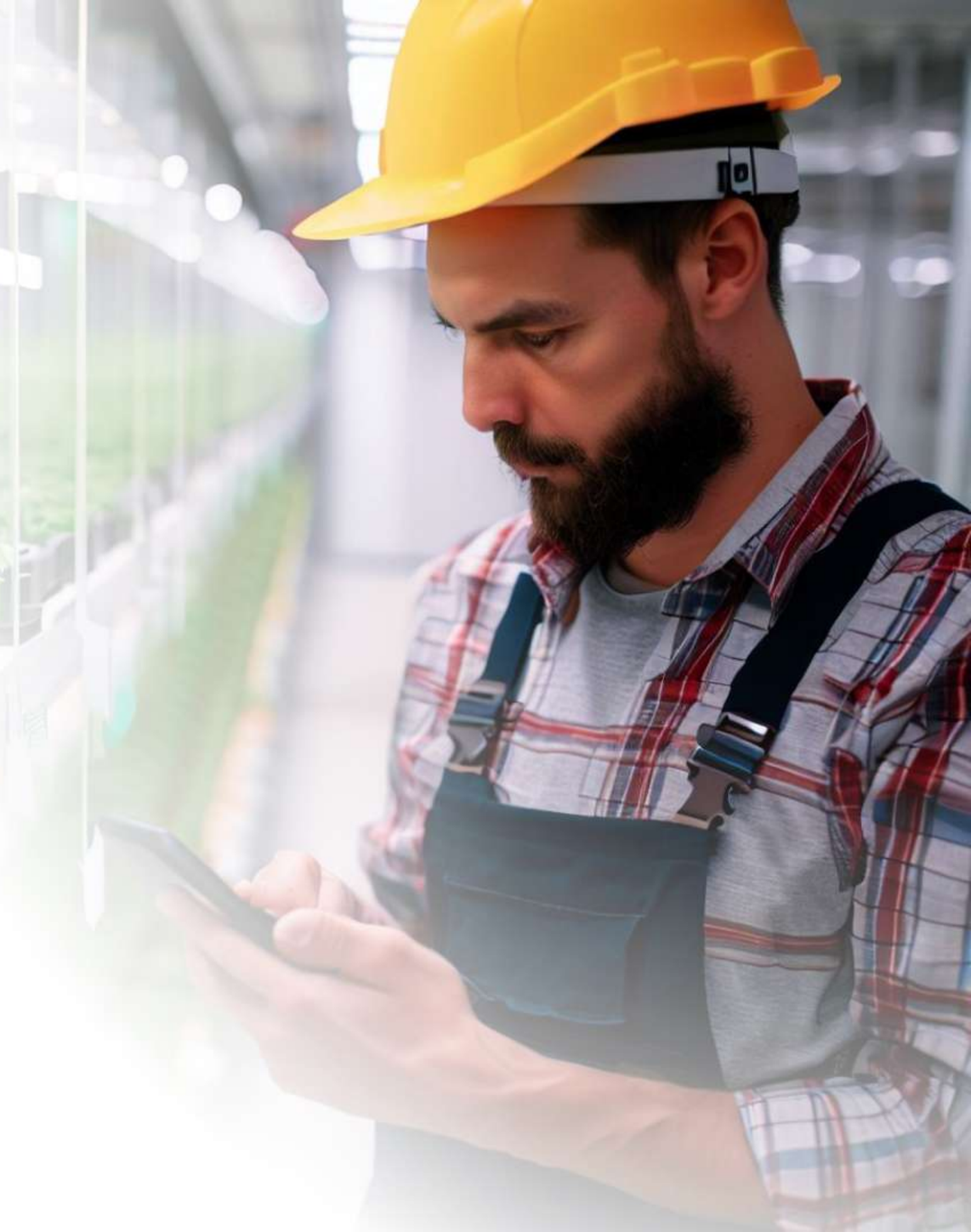
4. **Harvesting:** Plan for efficient harvesting methods that make it easy to access and pick ripe strawberries as they mature. Vertical farming systems should be designed for easy maintenance and harvesting.

5. **Sustainability:** Vertical farming can be more resource-efficient than traditional agriculture, but it's important to minimize its environmental footprint further by using renewable energy sources and sustainable practices.

6 Monitoring and harvesting

The harvesting process for strawberries in a vertical farm follows a careful and systematic approach to ensure the efficient collection of ripe, **high-quality berries**.

The controlled environment of vertical farms allows for precise **monitoring and harvesting**, resulting in high-quality, consistent, and year-round strawberry production. This method of cultivation minimizes the need for pesticides and reduces the risk of contamination, making it an attractive option for supplying **fresh strawberries to local markets**.



Live Cameras

Live camera feed for monitoring all vertical farm rooms.

Room Statistics

Projected statistics for a single room in real-time.

Live cameras

7 Contact

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