

**Vertical Farming Market- Global Industry Size, Share, Trends, Opportunity, and Forecast, 2018-2028F**  
**Segmented By Structure (Building Based, Container-Based), By Growing Mechanism (Hydroponics, Aeroponics, Aquaponics), By Crop Type (Leafy Green, Pollinated Plants, Nutraceutical Plants), By Component (Lighting, Hydroponic Component, Climate Control, Sensors, Others), By Application (Indoor, Outdoor), By Region**

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**Report description:**

Global Vertical Farming market is anticipated to grow significantly through 2028 due to the growing demand for healthy and safe food. In 2019, Hydroponics made up around 51.33 % of the market value of indoor farming technology worldwide.

The increased demand for organic and high-quality foods has changed the production capacity of vertical farming businesses and given them a foundation to assure high-quality and quantity-authorized production to satisfy the growing needs. In addition, individuals have begun growing fruits and vegetables indoors, giving rise to the idea of indoor vertical farming resulting in the growth of global vertical farming market in the forecast period.

**Increasing Demand for Healthy and Safe Food**

Due to the rising need for nutritious and secure food, hydroponics is expected to experience exceptional growth. Growth in hydroponics is driven by expanding inventions to enhance the tastes and sustainability of fruits and vegetables. The demand for this kind of farming method is fueled by decreased water consumption and increased output potential. When grown hydroponically, plants typically yield more than those that are grown in soil. By utilizing this technique, the danger of illnesses that affect soil is decreased. In this technique, a mineral solution is used in lieu of the soil to surround the roots of the plant. For instance, according to United Nations Convention to Combat Desertification (UNCCD), due to an increase in urbanization

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annual loss of 1.6 to 3.3 million hectares of prime agricultural land between 2000 and 2030 is expected.

Therefore, the demand for alternative farming practices such as hydroponics which are less dependent on land and space leads to the growth of Global Vertical Farming Market in the upcoming years.

#### Growing Demand for Container-Based Vertical Farming

The key advantages of container-based farming are that the entire operation of crop production is done in a container, making it simple to transport and requiring less land. In comparison to single-level agricultural land, this method of cultivation offers roughly eight times as much growing space, extending the time during which a city's food security is guaranteed.

For instance, in November 2021, Bowery Farming built urban vertical farms, based on NASA's data-driven model, built into existing structures such as vacant warehouses.

Therefore, increasing demand for container-based farming results in growing the demand of Global Vertical Farming market during the projected period.

#### Lighting will be the Key Component

In order to support vertical farming, the lighting system includes LED lights, pink lights, grow lights, grow light ballasts, grow light reflectors, and other kinds of artificial cultivation lights which save operating expenses and limit power usage. LED lighting systems are becoming more and more popular. LED lighting systems produce less heat than traditional light sources, making them perfect for agricultural settings.

Furthermore, the need for temperature control components is driven by a shift in customer demand for out-of-season food. Components of climate control aid in regulating the humidity, lighting, and temperature. The ability to control sophisticated temperature control systems from a computer or mobile device is anticipated to spur the development of hydroponics components. All these factors increase the demand for Global Vertical Farming market in the forecast years.

#### Recent Developments

-□ In November 2022, AeroFarms and QFZA Announced the Middle East Expansion of AeroFarms with a New Commercial Indoor Vertical Farm in Qatar Free Zones.

-□ Bowery opened a new vertical farm in Pennsylvania in May 2022.

-□ In the Ica Maxi superstore in Linköping, Sweden, Swegreen debuted the "NextGen" of very effective in-store vertical farms in April 2021.

-□ In October 2020, Bright Farms assured USD100 million to expand its indoor farming.

#### Market Segmentation

Global Vertical Farming Market is segmented based on structure, growing mechanism, crop type, component, application, region and competitive landscape. Based on structure, the market is categorized into building-based and container-based. Based on growing mechanism, the market is divided into hydroponics, aeroponics, and aquaponics. Based on crop type, the market is fragmented into leafy green, pollinated plants, and nutraceutical plants. Based on application, the market is segregated into indoor, and outdoor. Based on region, the market is divided into North America, Europe, Asia Pacific, South America, Middle East & Africa.

#### Company Profiles

AeroFarms LLC, AmHydro, Urban Crop Solutions, Bowery Farming Inc., Freight Farms, Inc., Crop One Holdings, Inc., Altius Farms, Inc., Plenty Unlimited Inc., Upward Enterprises Inc., Intelligent Growth Solutions Limited are some of the key players in the Global Vertical Farming Market.

#### Report Scope:

In this report, Global Vertical Farming market has been segmented into the following categories, in addition to the industry trends, which have also been detailed below:

-□ Vertical Farming Market, By Structure:

o□ Building-Based

o□ Container-Based

-□ Vertical Farming Market, By Growing Mechanism:

o□ Hydroponics

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- o□Aeroponics
- o□Aquaponics
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  - o□Leafy Green
  - o□Pollinated Plants
  - o□Nutraceutical Plants
- Vertical Farming Market, By Component:
  - o□Lighting
  - o□Hydroponic Component
  - o□Climate Control
  - o□Sensors
  - o□Others
- Vertical Farming Market, By Application:
  - o□Indoor
  - o□Outdoor
- Vertical Farming Market, By Region:
  - o□North America
    - United States
    - Mexico
    - Canada
  - o□Europe
    - France
    - Germany
    - United Kingdom
    - Spain
    - Italy
  - o□Asia-Pacific
    - China
    - India
    - South Korea
    - Japan
    - Singapore
  - o□South America
    - Brazil
    - Argentina
  - o□Middle East & Africa
    - South Africa
    - Saudi Arabia
    - UAE

Competitive landscape

Company Profiles: Detailed analysis of the major companies in global vertical farming market.

Available Customizations:

With the given market data, TechSci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

- Detailed analysis and profiling of additional market players (up to five).

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