



GREENBAR



Engineering and IT- Solutions for
vertical farming

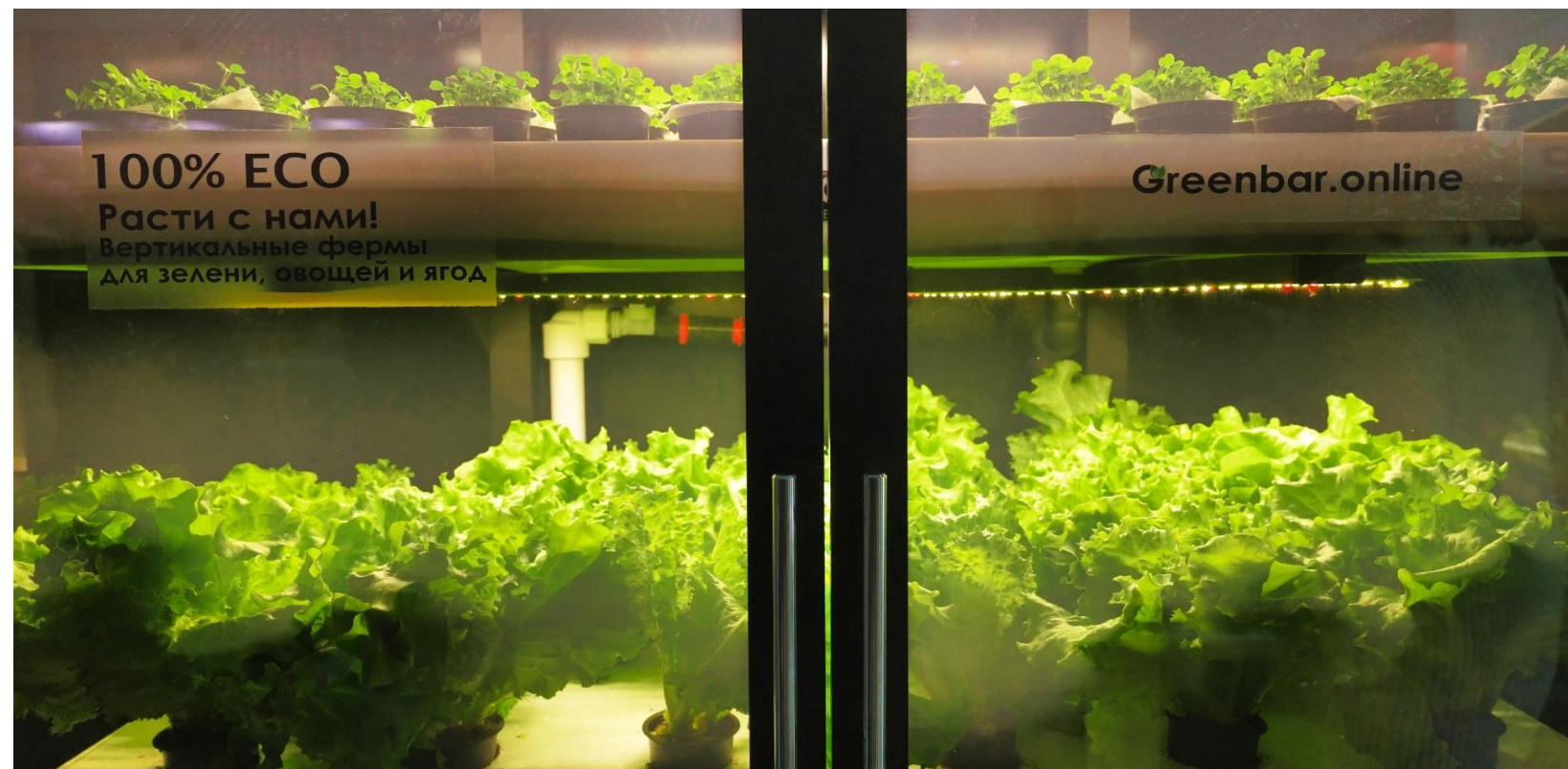
Invitation to partner with
leading technology provider

Directory Member FoodTech 500 2021

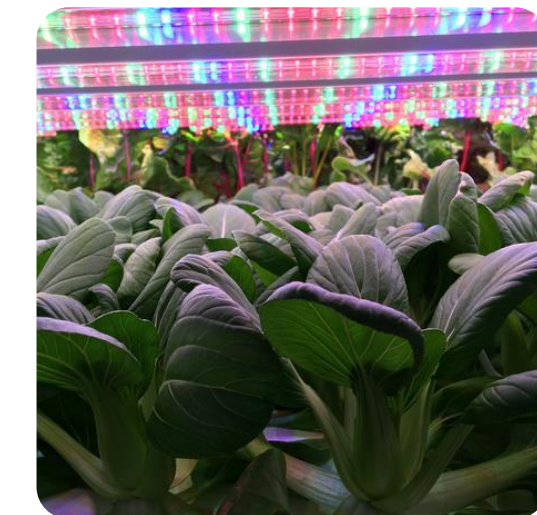


WE GROW

ON THE BASIS OF THE SOFTWARE "VIRTUAL AGRONOMIST"



- ✓ MICROGREEN
- ✓ SALADS
- ✓ SPICES
- ✓ MEDICINAL HERBS
- ✓ EDIBLE FLOWERS
- ✓ BERRIES
- ✓ VEGETABLES
- ✓ FRUITS



STORY

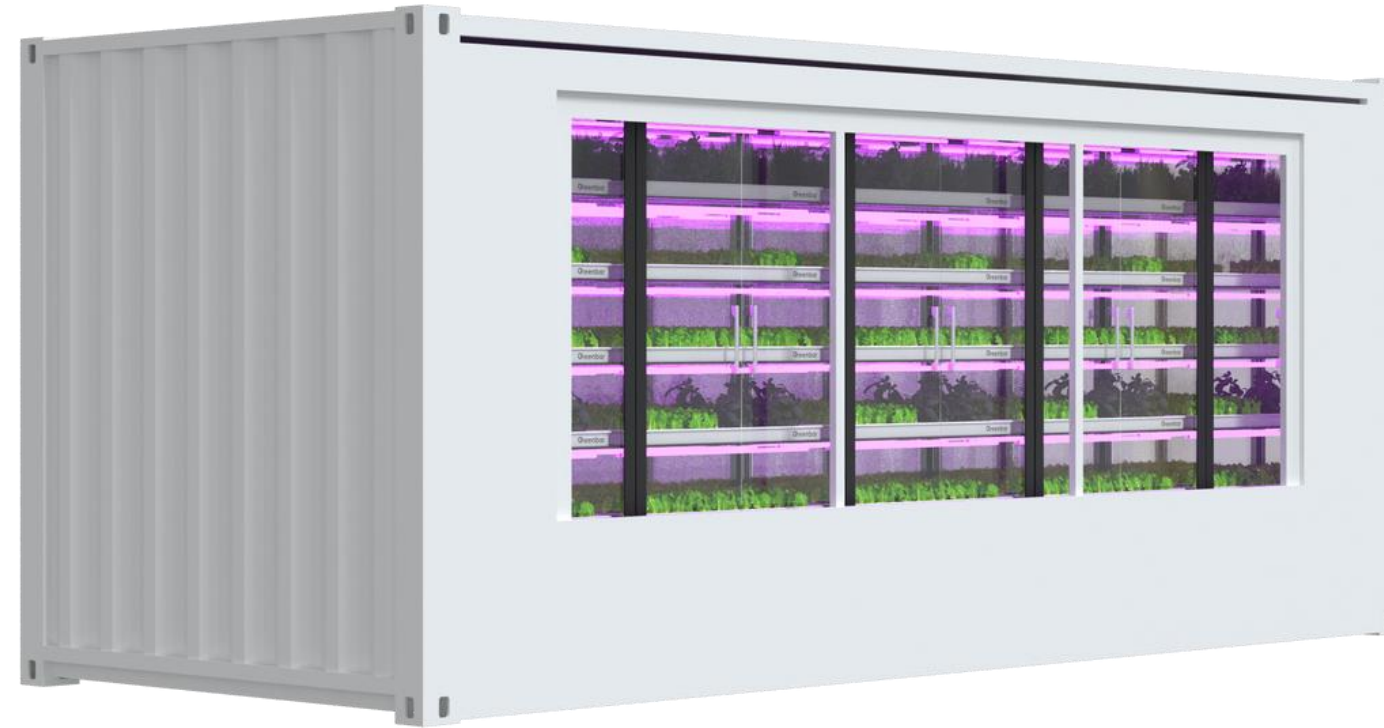
WE WENT FROM THE FIELD TO TECHNOLOGICAL PRODUCTION

- ✔ 2012 Breeding center established on 50 ha
- ✔ 2013 Landscape park "Bezhin meadow" was created
- ✔ 2014 an autonomous bio-vegetarian with IT management was built
- ✔ 2015 hydroponic vertical farm launched
- ✔ 2016 Indoor hydroponics production launched
- ✔ 2017 Serial production of bioponic devices was launched
- ✔ 2018 planted the world's largest maze of 20,000 plants - seed bank
- ✔ 2019 serial production of modular vertical farms using biotechnologies
- ✔ 2020 entering international markets scaling
- ✔ 2022 Greenbar farm franchise sale via Alibaba
- ✔ 2023 Opening of service centers and production sites in the UAE and ASIAN countries



Urban vertical farms

Our product line



**WE PRODUCE:
VERTICAL FARM MODULES AND CONTAINER
FARMS FOR GROWING ORGANIC FOOD AND
MEDICINAL PLANTS WITH AUTOMATED FARM
MANAGEMENT SYSTEM CALLED "VIRTUAL
AGRONOM".**

Farm management system

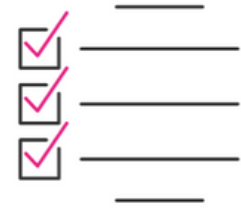
VIRTUAL AGRONOMY ONLINE SERVICE



MINIMAL HUMAN PARTICIPATION

Press the button - wait for the harvest!

Feeding and watering
Light, temperature and humidity control. Maintaining pH
Mixing trace elements



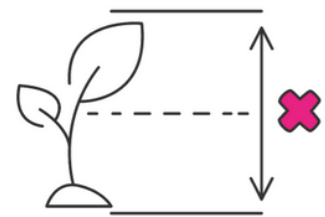
EASY TO MANAGE

Remote control from any PC, mobile and tablet. Manage your farm from anywhere in the world. All analytics and knowledge base in one interface



EASY SCALING

The virtual agronomist can easily cope with the expansion. Manage square meters of farm or thousands of lonely square meters. Unlimited number of monitoring and control devices



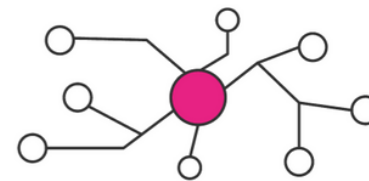
GROWTH PROGRAMS

Virtual agronomist - database of technological maps and program codes for growing different crops



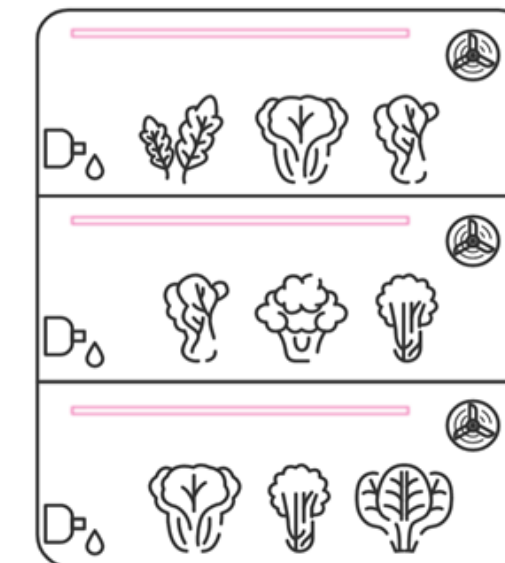
ONLINE-MONITORING

All changes in the Greenbar operation parameters are displayed on the graphs of resource consumption, electricity, climate, humidity, power supply



ONGOING DEVELOPMENT

We are working on technologies that will make farms "smart" and autonomous using our own IT management and control system



OUR SOLUTION

A NETWORK OF URBAN FARMS WITH A SINGLE VIRTUAL CONTROL CENTER

NETWORK OF LOCAL FARMS CLOSE TO END CONSUMER
MINIMISING LOGISTICS AND SPOILAGE COSTS



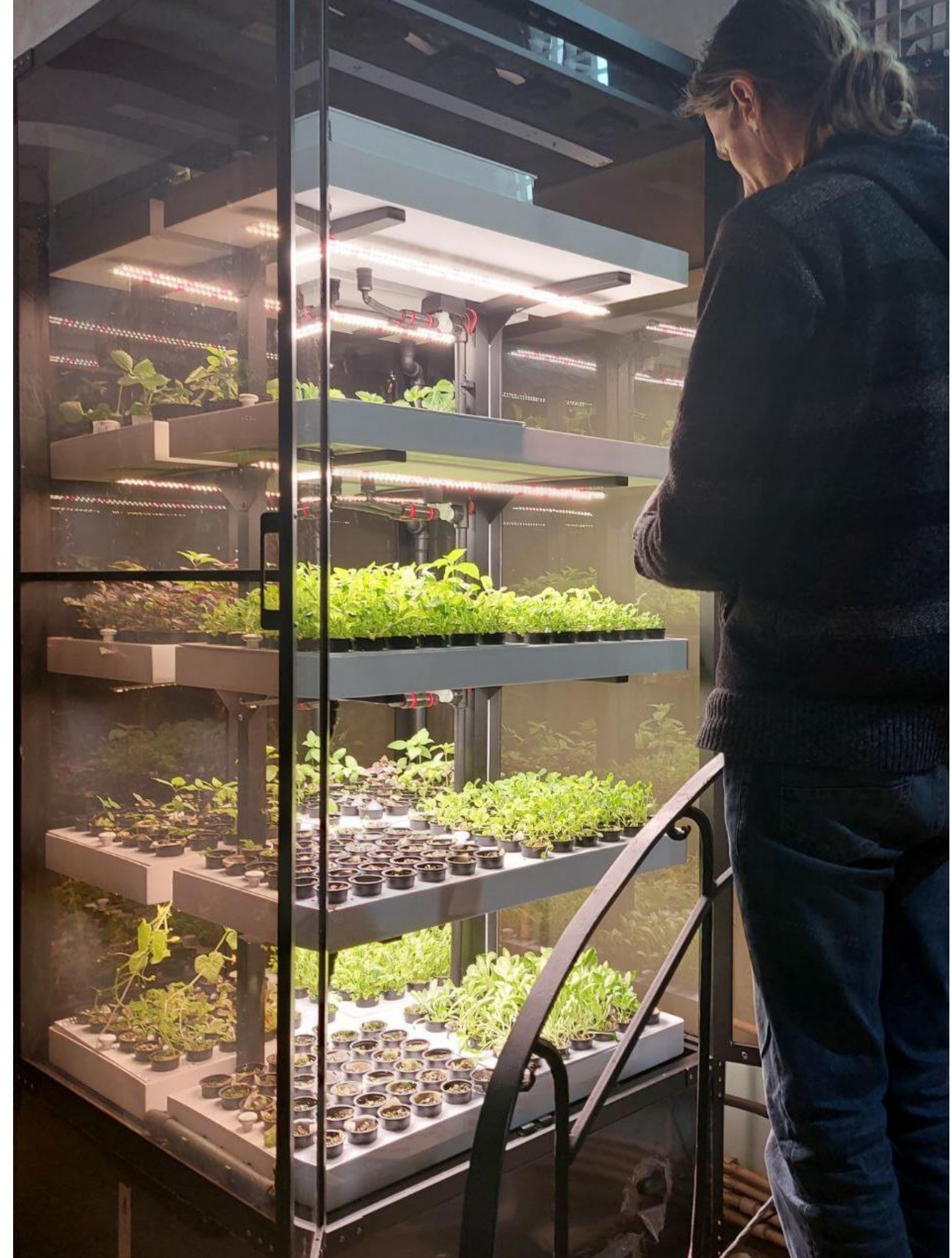
Green bar farm management system key features

- ✓ TEMPERATURE CONTROL
- ✓ HUMIDITY CONTROL
- ✓ PHYTOLIGHTING
- ✓ VENTILATION – CO₂ and POLINATION
- ✓ NUTRIENT CONTROL
- ✓ PLANT QUALITY CONTROL SYSTEM
- ✓ DATA LOGGING

System Advantages

COMPARED WITH HYDROPONIC FARMS

- ✔ FULL GROWING AUTOMATION
- ✔ 100% ORGANIC PRODUCE
- ✔ REDUCED LOGISTICS COSTS
- ✔ 0% SPOILAGE
- ✔ FREE OF MOLD AND INSECTS
- ✔ 0% CHEMICALS, GMOs AND PESTICIDES
- ✔ SAVE WATER BY 90%
- ✔ MINIMAL SPACE REQUIREMENTS
- ✔ STABLE PRODUCTION 365 DAYS A YEAR



ACCOMMODATION ADVANTAGES

Compared to hydroponics and other systems

✓ MINIMUM ROOM REQUIREMENTS

Heating t- +15-22

Water supply

Electricity supply 220V

✓ NO HIDDEN COSTS

Minimum room renovation requirements

Does not require built-in exhaust and ventilation

Does not require an industrial zone for water treatment and communications as in traditional hydroponics

✓ BIO TECHNOLOGIES

Bioquantoponics technology - only organic food

Quality control systems according to 8 standards

Insects do not start in the system

The system does not stagnate or rot water and does not stink of a swamp. We use high quality food grade materials



SERVICE SUPPORT

ON-LINE FARM MANAGEMENT SUPPORT 24/7

✔ CONTROL

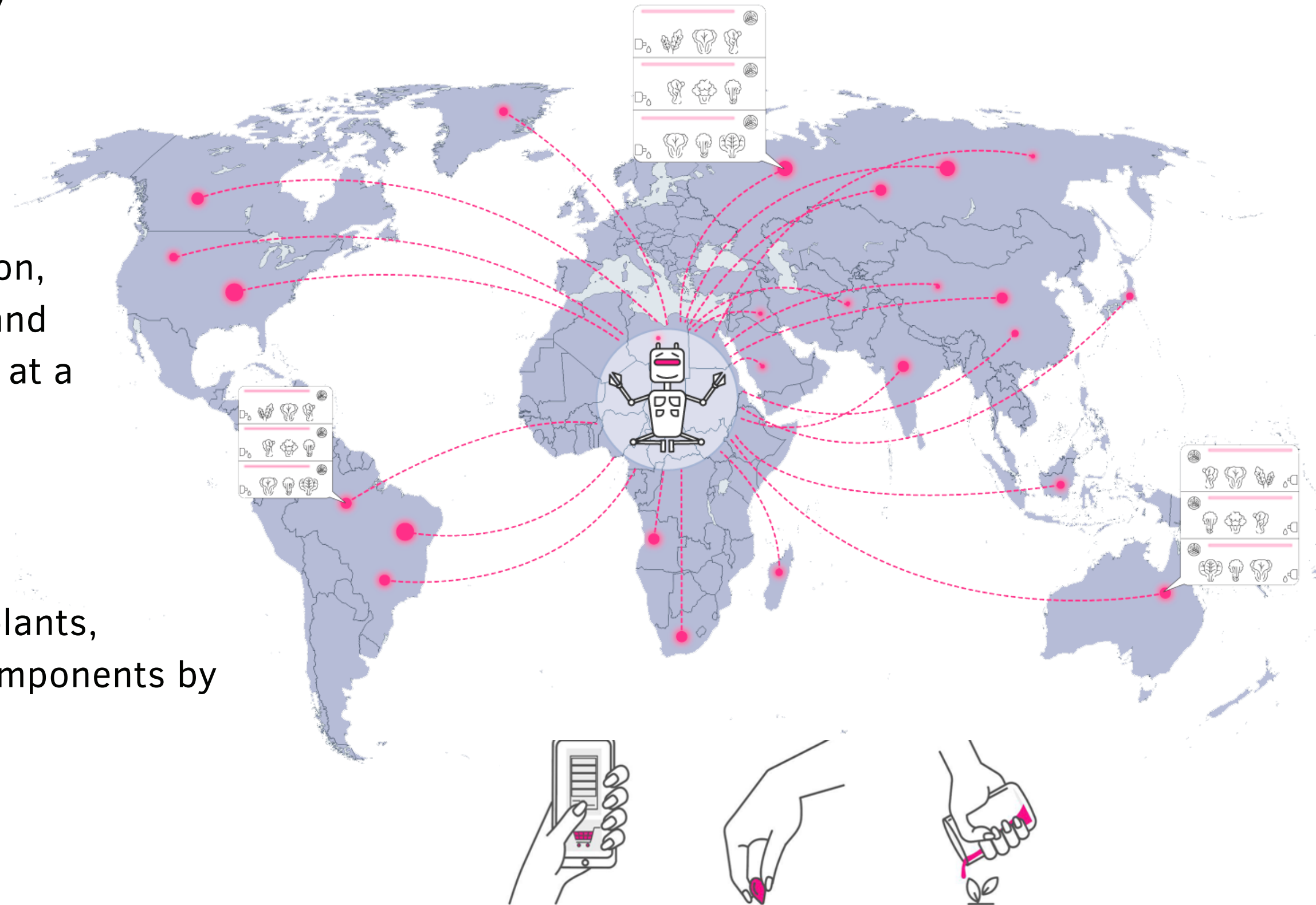
Virtual agronomist - control all growing processes, set your parameters for nutrition, microclimate, lighting, temperature, CO2 and much more for each stage of plant growth at a distance.

✔ SUPPLY

Supply of seeds, nutritional cocktails for plants, consumables, packaging, all necessary components by subscription.

✔ SUPPORT

Online control of all parameters on a single management system and 24/7 support online



Global Market Situation

Current trends



- Zero farms with Carlo Ratti to build Farmscraper – Jian Mu Tower The 51-storey building dedicates 10,000 square meters to the cultivation of crops, creating a vertical hydroponic farm.
- German startup **Infarm** received a \$ 2.5 million grant from the European Commission. Then, in several rounds, raised \$ 25 million \$ 75 million \$ 100 million \$ 170 million \$ 250 million
- American startup Plenty plans to open 300 vertical farms in China. In the future, the company intends to build its farms in all million-plus cities in the world.
- Plenty systems consist of multi-tiered shelves on which leafy vegetables grow under LED lights. The farm is 4,600 sq. It produces about 900 tons of lettuce by meters - 350 times more than in the fields and greenhouses of the same area.
- Bayer partners invest \$ 30 million in vertical farming venture
- Elon Musk's brother opened his network of container farms for an investment of \$ 200 million

COMPETITIVE ANALYSIS



	Greenbar	Aerofarm	Emirates	InFarm	Square roots	Ifarm
Location	Russia	USA	UAE	Europe	USA	Russia
Management						
Quality programming	v					
Light	v	v	v	v	v	v
Temperature	v	v	v	v	v	v
Nutrient	v	v	v	v	v	v
Humidity	v	v	v	v	v	v
CO2	v	v	v	v	v	v
Polination	v					
Quality control	v Online	v Manual	v Manual	v Manual	v Manual	v Manual
Logging	v					v
Base Tech	Bioponics	Aeroponics	Hydroponics	Hydroponics	Hydroponics	Hydroponics
	Bioquantoponics					

SUSTAINABLE DEVELOPMENT

WE ARE IMPLEMENTING 12 OF THE 17 UN GOALS

- ✔ Environmental and non-financial reporting
- ✔ Environmental management system according to International standards
- ✔ Biotechnology - with the help of artificial intelligence it is possible to receive income from 1 month of launch
- ✔ Compliance with International Environmental Standards and UN Sustainable Development
- ✔ Always live products at arm's length
- ✔ Stabilization of nutrient solutions 0 waste and fertilizers
- ✔ Transformation of existing CSR costs from irretrievable to socially oriented
- ✔ Return on investment and their subsequent reinvestment in new facilities
- ✔ Increasing socially important facilities and the quality of their services
- ✔ Formation of a sustainable level of benevolence of the population with the existing level of investment in a socially-oriented object
- ✔ REDUCING THE CARBON FOOTPRINT IN SUPPLY



PROJECTS AND CLIENTS

Russia

SPA Verba Maier

L E S restaurant

Bogdarnya restaurant

UAE

TAIGU Restaurant

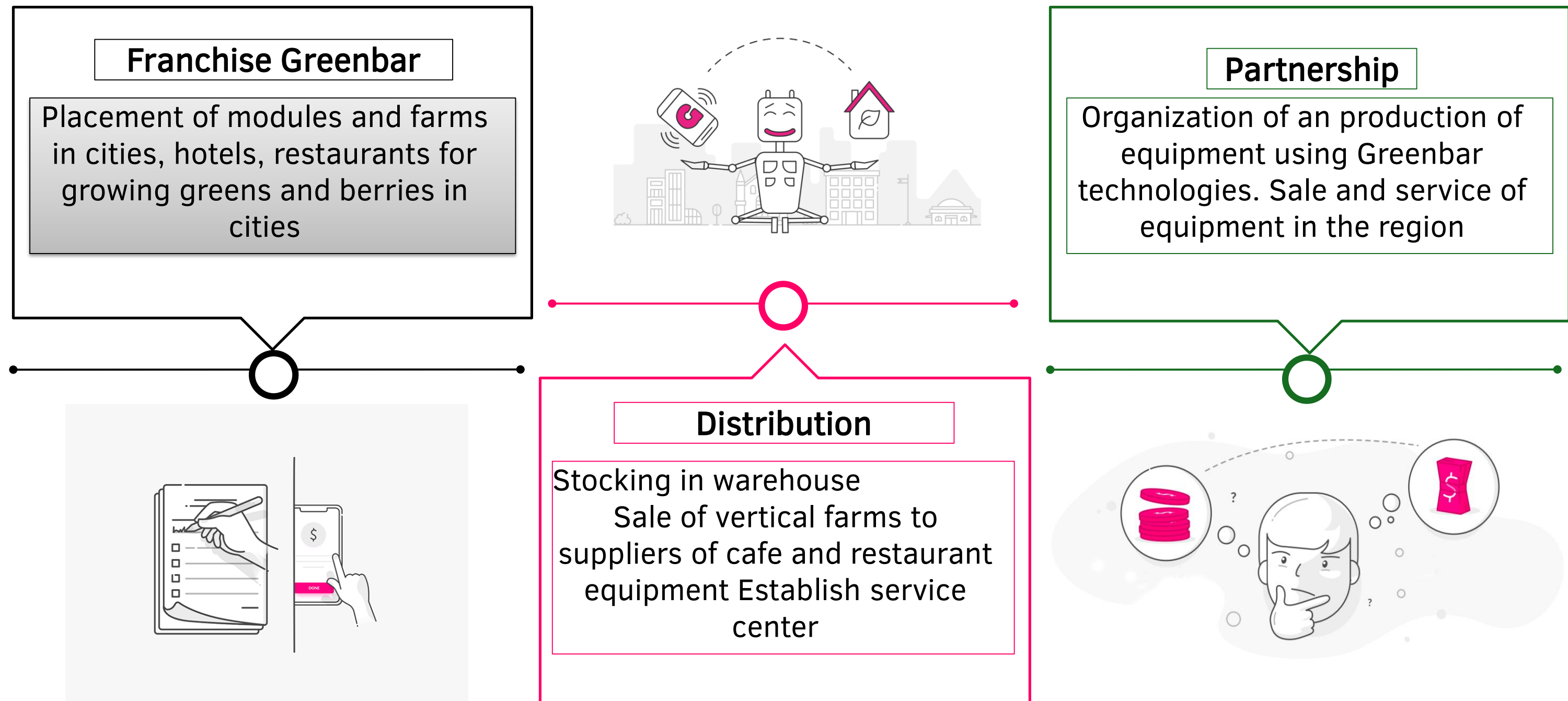
Kazakhstan

Organic food store



BUSINESS OFFER

OBJECTIVE: «TO ESTABLISH A PARTNERSHIP WITH LOCAL PARTNER IN THE REGION TO WHOM WE PROVIDE TECHNOLOGY. THE PARTNER WILL TAKE ON MANUFACTURING SALES AND SERVICE OF FARM, GREENBAR PROVIDES FARM MANAGEMENT SYSTEM AS ONLINE SERVICE WITH ABILITY TO SET UP LOCAL SERVER AND ONLINE MONITORING.



PARTNER PROFILE

REQUIREMENTS FOR LOCAL PARTNER

- ✔ Experience and expertise: in vertical farming, sales or other business, the manufacturing sector, installation of equipment for the hotel and restaurant business
- ✔ Locality and Connections: Local business presence in the region and established links with local governments, agricultural organizations, potential clients, investors
- ✔ Knowledge of local legislation and policy: in the field of industrial construction, agriculture and food security and business regulation.
- ✔ Sustainability and Social Responsibility: Applying environmentally friendly production methods, caring for the well-being of employees and the local community, and participating in initiatives for economic development and social inclusion.



PROJECT TEAM

GROW WHERE YOU WORK, EAT AND LIVE!



@greenbar365



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