Jobenomics National Grassroots Movement focus is on mass-producing small businesses and jobs.

Controlled Environment Agriculture (CEA) Program
For Under-Resourced Urban & Rural Communities

Chuck Vollmer
Jobenomics Founder & President
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Controlled Environment Agriculture (CEA)

- A process of growing plants inside a grow room or greenhouse.
- CEA allows a grower to maintain light, carbon dioxide, temperature, humidity, water, pH levels, and nutrients to produce crops in ideal growing conditions with maximum yields.
- Jobenomics’ CEA program is focused on mass-producing agribusinesses, micro-farms and agricultural-related jobs.

Ailing U.S. Small Farm & Food Manufacturing Industries

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Hired* Farm Workers</td>
<td>Employment</td>
</tr>
<tr>
<td></td>
<td>Year 2000</td>
</tr>
<tr>
<td></td>
<td>1,332,000</td>
</tr>
<tr>
<td>Food Manufacturing Jobs</td>
<td>1,562,500</td>
</tr>
<tr>
<td>Private Sector Nonfarm Jobs</td>
<td>110,246,000</td>
</tr>
</tbody>
</table>

| Farm & Food Jobs % of Total                     | 0.4%                                                   |

*Not including family farmworkers that decreased by from 8 million in 1950 to 2 million in 2000. Today, small farms are in crisis with fewer people entering the industry and worsening economic conditions.

CEA can create tens of thousands of micro-businesses and jobs in under-resourced rural and urban communities.
Part of the 2017 Tax Cuts and Jobs Act, Opportunity Zones promise positive social impact by driving billions of dollars in long-term investment into under-resourced urban and rural census tracts.
Jobenomics CEA Partnership

- Team: Jobenomics is teamed with ACTS Freedom Farms of America.

- Mission: Provide a solution to food shortage through self-sustaining and supportive live-work communities.

- Vision: Provide quality foods in harmony with the global environment, while empowering individuals to become an important partner in high-tech controlled environment agriculture.

- Strategy: 1) home ownership combined with an agriculture career, 2) corporate owned indoor commercial growing operations and 3) train high-tech controlled environmental agricultural farmers.

ACTSFFA has secured commitments from three Opportunity Funds that have $150 million available for our CEA programs.
AG Core & Micro-Farms

- Initial cadre will be mostly veterans (vetting and financing considerations) but will also include non-veterans.

- AG Core is the corporate team that manages and trains new recruits until they are capable of assuming the responsibility to run entire operation.

- Each micro-farm will consist of the land and a leased greenhouse that will be equipped and supplied by AG Core.

Base earnings will be $35,000 to $40,000 annually with bonuses and profit sharing upon completion of first year.
California 1200-Acre Freedom Farm

Designed by ACTSFFA/Oculus for veteran-owned businesses and homes.

2.6 million sq. ft. of indoor controlled environment agriculture, greenhouse village, hotel, farmers market, winery, production and distribution facilities, commercial/community/education/worship centers, and 300 single-family homes on 2-acre lots.
The Jobenomics/ACTSFFA/PowerGrow team is working with leading greenhouse, grow-house and CEA vertical and hydroponic suppliers.
5-Acre Greenhouse
Large Scale Jobs Engine

Acre Comparison
Indoor: 5
Outdoor: 93

Revenue Comparison
Indoor: $3,389,829
Outdoor: $2,259,886

EBIT Comparison
Indoor: $874,822
Outdoors: $201,322

Significantly more efficient and cost effective than outdoor farming.
1-Acre Controlled Environment Agricultural Project

Jobenomics/ACTSFFA are currently pursuing 1-acre CEA pilot projects in Iowa, West Virginia, Las Vegas, Washington DC, Baltimore, Chicago, Erie PA, Montgomery County MD, Puerto Rico, and Alberta Canada.
Produce On Demand (POD) System

- **Year End Cash Balance**: Year 1 = $350,000, Year 2 = $650,000.
- **Indoors versus Outdoors**: 5-acre comparison: Indoor is 18-times more productive, Indoor generates 50% more revenue, Indoor EBIT is 434% higher than outdoor agriculture.

*Earnings Before Interest & Taxes

Significantly more efficient and cost effective than outdoor farming.*
Produce On Demand (POD)

Features

- **Easily Scalable Modular Facility**
  - Expandable modular construction for increased production
  - POD can be sited on any flat surface with limited site preparation

- **Food Safety Compliant**
  - Good Agriculture Practices (GAP)
  - Good Handling Practices (GHP)
  - Food Safety Modernization Act (FSMA)

- **Smart Technology**
  - Remote & Cloud-based Systems
  - Facility Management
  - Food Production Knowledge-Base
  - Security Access
  - Labor Management

- **Climate Controlled Growing**
  - LED Lighting
  - HVAC Systems
  - Fertigation Systems
  - CO2 Generation
  - De-Humidification Systems

Our POD systems are ideal proof-of-concept programs.
Modular Construction

- Affordable multiuse configurations: micro farms, homes, offices.
- Livable: from 1,000sf to 3,000sf units.
- Environmental: LEED certified, insulated, mold resistant, solar.
- Suitable for small lots (1/8 acre) & spaces:

  Vertical Configuration
  (up to 3 stories)

  Modular/Portable

  Proven
  (TV Star Rick Harrison’s Pawn Plaza in Las Vegas was built with the same manufactured modules as a POD)

Our modular units have even been utilized for shopping centers.
Produce On Demand (POD)
Off-Grid Configuration

A POD is for growing. Processing and packaging will be either conducted in the POD or secondary sites.

100kW Solar Array

Modular Growing Facility

EV Refrigerated Truck & Charging Station

HVAC/Power & 20kW Storage Station

Produce will be harvested every 30-60-90 days depending on crops.
Live/Work Eco-Communities

Opportunity Zone Fund financing now available.

LEED Certified Platinum
Affordable Net-Zero Community
Storm Water Capture & Reuse

Renewable Energy
State-of-the-Art Information Technology

Smart Homes
Community & Co-Working Facilities

Dual Use HVAC

Opportunity Zone Fund financing now available.
Sustainable & Affordable Ecosystems

- Highly-scalable designs based on integrated solutions
  - Design-build project delivery with advanced building, materials, energy and environmental technologies
  - Increased use of modular systems and pre-fabricated units

- Sustainable single-family, multi-family & community programs
  - Increase usage of single-family accessory dwelling units
  - Implement new multi-generational, multi-family concepts
  - Create dedicated workforce business/housing communities

- Revitalize under-resourced communities and neighborhoods
  - Mass-produce micro businesses and jobs with livable wages
  - Mobilize community-leaders and officials to streamline permitting, zoning and land use regulations
  - Maximize Opportunity Zone and private sector funding

Efficiently produce high quality, lower cost homes and businesses.
Live/Work/Play/Retire Complex

Meets community needs for affordable homes, safety, green eco-friendly facilities, and business/job creation.
Scaling Into Local Markets
Launch – Expand – Scale

**POD LAUNCH**
Growing Crops and Generating Revenue in 60 to 90 Days
3-5 Direct Jobs

**YEAR 1**

**1 ACRE POD EXPANSION or 1 TO 5 ACRE GREENHOUSE**
Expandable Footprint for Market Expansion and Multiple Crops
20-30 Direct Jobs

**YEAR 2**

**5 TO 15 ACRE GREENHOUSES**
Maximizes Economies of Sale, Revenue and Profits
150 Direct Jobs

**YEARS 3 - 5**

10-50 PODs located throughout major metropolitan areas.

1-3 complexes in counties and regions.
Typical Income Statement
Washington DC POD, February 2019

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td>$746,567</td>
<td>$846,613</td>
</tr>
<tr>
<td><strong>Cost of Goods Sold</strong></td>
<td>$142,016</td>
<td>$144,066</td>
</tr>
<tr>
<td><strong>Gross Profit</strong></td>
<td>$604,551</td>
<td>$702,548</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
<td>$298,573</td>
<td>$238,573</td>
</tr>
<tr>
<td><strong>EBITDA</strong></td>
<td>$305,978</td>
<td>$463,975</td>
</tr>
<tr>
<td><strong>Depreciation</strong></td>
<td>$209,588</td>
<td>$378,834</td>
</tr>
<tr>
<td><strong>Operating Income</strong></td>
<td>$96,390</td>
<td>$85,141</td>
</tr>
</tbody>
</table>

Starting Capital
- 2019: $300,000
- 2020: $322,571

Ending Cash Balance
- 2019: $322,571
- 2020: $567,963

ACTSFFA team will meet with local buyers and conduct a detailed financial assessment before contract award.
CEA Growing System
AgroTech's ZipGrow System

ZipGrow is the world’s most installed vertical farming technology.
### High $ Value CEA Products

<table>
<thead>
<tr>
<th>Common Crops</th>
<th>Specialty Crops</th>
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<tbody>
<tr>
<td>Culinary Herbs</td>
<td>Medicinal Herbs</td>
</tr>
<tr>
<td>Lettuce</td>
<td>Flowers</td>
</tr>
<tr>
<td>Spinach</td>
<td>Mushrooms</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>Ground Covers</td>
</tr>
<tr>
<td>Strawberries</td>
<td>Ornamental Grasses</td>
</tr>
<tr>
<td>Peppers</td>
<td>Bamboo</td>
</tr>
<tr>
<td>Cucumbers</td>
<td>Hemp</td>
</tr>
</tbody>
</table>

The highest value crop is hemp. Cultivating hemp for CBD oil can generate as high as $75,000 per acre in controlled conditions.
Culinary & Medicinal Herbs

**Culinary Herbs**
- Basil
- Chives
- Caraway
- Dill
- Oregano
- Parsley
- Tarragon
- Mint
- Thyme
- Rosemary
- Sage

**Medicinal Herbs**
- Chamomile *(pain, inflammation, cramps)*
- Cinquefoil *(inflammation, ulcers, jaundice)*
- Feverfew *(migraine, fevers, arthritis)*
- Foxglove *(cardiac contractility, heart rhythm)*
- Golden Rod *(menstruation, arthritis, eczema)*
- Wintergreen *(cooling properties: gum, mints, etc.)*
- Many Others

The global dried herbs market is around $4 billion per year.
The highest value crop is hemp. Cultivating hemp for CBD oil can generate as high as $75,000 per acre in controlled conditions.
### Cannabis

#### Same Species With Different Chemical Compounds And Applications

<table>
<thead>
<tr>
<th><strong>Hemp</strong></th>
<th><strong>Marijuana</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Cannabis Stativa</em></td>
<td><em>Cannabis Indica &amp; Stativa</em></td>
</tr>
</tbody>
</table>

- **Legal** (2018 U.S. Farm Bill)
- **Federally illegal** (10-States legal)
- Usage: agricultural, industrial, medical & pharmaceutical
- Usage: mainly recreational with a few medical applications
- Primary compound: **CBD** (Cannabidiol) grown for its non psychoactive properties
- Primary compound: **THC** (Tetrahydrocannabinol) grown for its psychoactive properties
- Main markets: medical, body-care, nutritional, construction materials, fibers, animal food
- Main markets: mood-enhancing (smoking, edible, vaping & infused beverages) products

The U.S. hemp-CBD market is growing faster than marijuana and will be a $22 billion industry by 2020 (up from $600m in 2018).
Hemp CBD Oil Extraction

- **Industrial hemp** extracts include pharmaceutical-grade **CBD oil** used for illnesses and pain relief.
- CBD market will grow 700% to $2.1 billion market in 2020.
- USDA 2018 Farm Bill includes language that legalizes hemp cultivation and production.
- CBD oil extraction systems fit in our highly-sanitized cube.

CBD oil extraction services are as profitable as cultivating hemp.
ACTS FFA Management Team

Business Innovation, Analytics, Fulfillment And Business Economics Experts

Michael Buehler
CEO & President Business Innovation

Bill O’Connor
Chief Analytics Officer
Project Financing Expert

Robert Flegal
Chief Operating Officer
Fulfillment Expert

Chuck Vollmer
Advisory Board Vice Chairman & Acting Chief Development Officer

ACTS Freedom Farms Advisory Board Members include controlled environment agriculture and fertigation experts.
ACTS FFA Support Programs

Federal, State, Local & National Team

- **Financial**
  - Land Acquisition, POD & Equipment Funding, Operating Capital

- **Operational**
  - Food Safety: GAP, GHP, FSMA
  - Organic Certification
  - Staff Augmentation with Subject Matter Experts

- **Sales & Marketing**
  - National Retail Produce Off-Taker Programs

- **Growing Expertise**
  - Upstart University, U of A CEAC, Master Grower Services
  - ACTS FFA extensive training ongoing.
  - Local Universities and colleges will utilize PODs as remote training centers for students.

ACTSFFA will manage CEA joint ventures from cradle-to-grave.
Contact Information

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